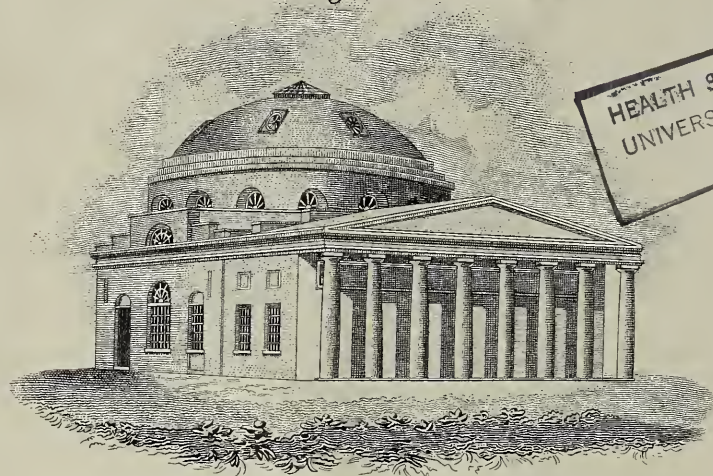




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# THE JOURNAL

OF THE

## Indiana State Medical Association

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION  
OF INDIANA

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Issued Monthly

Under the Direction of the Council

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ALBERT E. BULSON, JR., B. S., M. D., F. A. C. S.

Editor and Manager

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### OFFICE OF PUBLICATION

406 West Berry Street      -   -   -   -   -   Fort Wayne, Indiana

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INDEX TO VOL. XX

January to December, Inclusive, 1927





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VOLUME XX

JANUARY, 1927

NUMBER 1

### ORIGINAL ARTICLES

#### PRECANCEROUS LESIONS OF THE CERVIX UTERI\*

F. C. WALKER, M.D.  
INDIANAPOLIS

The number of cases of cancer of the cervix uteri coming too late for any form of curative treatment is so appalling that the surgeon is ever devising ways and means by which the deadly malady may be more generally detected at the earliest possible moment—at a time when something definite can be done. There appears to be only one known way to successfully combat the high cancer mortality and that is by the recognition of the process in the earliest stages, or better to identify those lesions which are definitely known to be the forerunner of malignancy in a very large majority of cases. Timely recognition and correction would greatly reduce the cervical cancer mortality.

In bringing this subject before you, I do not propose any new methods of operation or treatment, but to emphasize the great good to be done by more effort in recognizing such conditions and rendering the most effective service to a large number of women. So long as women continue to bear children; so long as infection occurs in the genital tract as frequently as it does, just so long will the cervix continue to be one of the most important points of persistent irritation. The cervix, because of its location, is strikingly susceptible to infection, trauma and malignancy.

Bloodgood, along with others, has been advocating for years the importance of correcting any precancerous condition anywhere in the body. Certainly the cervix can be no exception. The American Society for the Control of Cancer and the American Medical Association have done and are doing much to direct the attention of the profession and the laity to all forms of abnormal chronic, irritating conditions which predispose to malignancy. Their work in education will result in great good. It is strong argument for the early recognition of suspicious processes that lead to cancer formation.

The deaths from cancer of the cervix are nearly twenty thousand in the United States each year. In other words, that number of women living to-day, but afflicted, will be dead of cervical carcinoma within twelve months. It means about one death every twenty-five minutes. This is a conservative estimate because of the many cases that die of the disease and are not properly diagnosed. Thirty per cent of all cases of carcinoma occurring in women have origin in the uterus and about ninety-eight per cent of these develop in the cervix. One woman out of every twenty-seven dies of uterine cancer. The stomach and breast follow with less percentages. These facts are significant.

It is a well established pathological and clinical fact that almost every case of carcinoma has had some preceding conditions that were conducive or predisposing to abnormal cellular activity. Something that led up to it. Cancer always develops in pathological tissues—never in the normal. Meigs said years ago, "There is always an antecedent of alteration of tissue; a state which lays the foundation for a mild evolution and increase in cells."

There are four predisposing reasons why the cervix is so susceptible to cancer formation. First, two distinct types of cells join at the external os, the squamous cells of the vaginal portion and the columnar of the cervical canal. This is known to favor distorted cell activity, especially so when the conditions mentioned below are active. This complex cellular character gives a very unusual picture to many of the lesions occurring here. Second, trauma, due chiefly to injury at childbirth. It is a question whether or not uncomplicated lacerations very strongly predispose to malignancy. I do not think they do. Third, and most important, infections, both acute and chronic, especially the chronic. This is the chief complication involving the lacerated cervix that produces prolonged irritation. It is the best example of chronic irritation predisposing to malignancy. Fourth, discharge. This is the natural result from an injured, infected tissue. It is a secondary reaction resulting from the conditions mentioned, but acting as a very decided factor in chronic irritation. Where we see trauma alone we seldom

\*Presented before the Section on Surgery of the Indiana State Medical Association at the West Baden session, September, 1926.

find excessive secretion, but where there is trauma plus infection there is discharge varying in amount and reaction. We know that irritation does cause cancer. This has been demonstrated in animals and to a more limited extent in man.

Precancerous conditions of the cervix occur during adult life, but more especially during the third, fourth and fifth decades. They are confined almost entirely to women who have borne children. This fact impresses us with the importance and significance of lacerated and infected cervical tissues as precancerous factors. Women who have no cervical lacerations with infections are seldom afflicted with cancer.

The cause of cancer is not known. By this we mean that we do not know precisely just why cells disobey the laws of natural reproduction and grow wild. In the absence of this knowledge of the specific cause of the disease, it seems reasonable to assume that these predisposing lesions are of the utmost significance and that a great deal more attention should be given to the cervix and its lesions than is customary.

By the term precancerous lesions, a number of atypical overgrowths of epithelial cells that have preceded the development of carcinoma have been considered. Robin probably first demonstrated that this morbid process had its commencement in the epithelium and early is essentially a local process. A large volume of literature has accumulated on this subject. It has been questioned vigorously whether or not it is possible to properly designate such lesions. Hansemann and Peck say not and there are a number who sanction their teaching, contending that it is or is not cancer. This may be true from the pathological and histological view point, but clinically there are very distinct precancerous lesions. This non-precancerous lesion teaching has been a hindrance to the very early recognition of dangerous conditions.

There are a few conditions that are often found in the cervix that bear a close relation to carcinoma. These are the so-called cervical erosions and polyps. The term cervical erosion is a misnomer as ordinarily used. It means strictly a tissue destruction, while the actual condition is one of overgrowth—glandular in character. This condition is always due to some form of chronic endocervical irritation, usually infection in the cervical mucosa and its glands, which stimulates overgrowth of the columnar cells with displacement of the squamous cell mucosa about the external os. It is a substitutional process. This condition is frequently associated with and aggravated by trauma and its results, such as scars. In the most striking examples of precancerous lesions the two conditions are found. The deeply infected, traumatic cervical lesion with adenomatous hypertrophy and discharge is the ideal illustration of chronic irritation, and consequently the best example of a precancerous lesion. The

importance of these lesions is emphasized by the fact that the lesions and carcinoma are very rare in childless women. Erosions and polyps contribute the vast majority of the precancerous lesion. In such processes we find the striking histological instances of epithelial reproduction, disregarding the laws of cellular growth with scant amount of stroma and a friable layer of columnar cells over the surface. There is an irregular line of demarkation and an easily bleeding surface. As a result of these changes a low grade irritation, predisposing to malignancy is certainly favored.

Cervical polyps may be associated with erosions or occur independently. They represent a definite form of a typical cellular proliferation with glandular character and very little stroma. Degenerative mucoid changes are prominent. There is very little ability to replace destroyed cells and pigmentation is scant. These epithelial proliferations are justly considered precancerous because of the extent to which glandular cells progress and the marked tendency to abnormal cell qualities. Such lesions should be considered dangerous signals and a cervix which shows a tendency to polyp formation must be considered suspicious, especially if they show signs of recurrence after removal. If they occur with erosions the significance is greater. A deeply lacerated, infected, everted cervix with erosions and polyps is a dangerous one.

The determination of a precancerous process is based upon the extent to which the proliferation has progressed and the individual cell characteristics. A strong tendency to a downward growth of the cell formations must be considered more than an inflammatory reaction hyperplasia, and as bordering very close to a malignant process. From this it requires no great amount of further cellular irritation to cause definite neoplastic development. Such a process is found in the life history of many malignant growths. A great volume of literature by such authorities as Cullen, Ewing and Ruben affirm these facts.

Other rarer conditions must not be overlooked, especially leukoplacia. Behind this benign looking mass may be developing a very active malignancy. It is atypical abnormal overgrowth of squamous epithelial cells. This condition often precedes cancer wherever it may occur. The characteristic deep hornifications have a marked inclination to grow downward with irregularity. Murphy taught that all leukoplacia of the tongue was always precancerous and it can just as well be said of the cervix.

It is not easy to differentiate between the precancerous lesion and real early cancer. It is done only with the microscope, and then our most skillful pathologists are in doubt as to the exact nature of the tissue changes. However, the clinical history and the characteristic cellular finding enable them to speak definitely in most instances. Cullen



teaches that all lesions showing atypical cell activity are potential cancers. Of course all these suspicious lesions do not produce cancers by any means. If it were so the female mortality would be much higher. He says, and the literature sustains his opinion, that where there is a marked proliferation of cells extending beyond that seen in precancerous lesions, with a penetration of atypical, hypertrophied papillae, composed of irregular cells of a wide variety in size and nucleus, one is justified in making a diagnosis of early cancer. If pearl formations are present with penetration of cells through the normal limiting zone, then we have unmistakable evidence of malignancy.

#### SYMPTOMATOLOGY AND DIAGNOSIS

How shall we clinically recognize these lesions? It is very evident that there is no way of definitely picking out these deceased cervixes that are going to develop malignancy. All of the lesions can not have microscopic study. Most cervical diseases show some evidence of their existence. Abnormal bleeding and discharge are the conspicuous outward manifestations of tissue alterations in the cervix. Unfortunately, pain is not common. The discharge varies greatly in amount and character. It is such a common complaint that a large number of women do not make mention of it. The same is true of irregular bleeding. It being one of the normal physiological activities of the genital tract to expel blood, misleads many women into the belief that all bleeding is menstruation. We should always remember that one of the chief parts of menses is bleeding but that all bleeding from the genital tract is not associated with the menstrual function. The thorough understanding and appreciation of this very important and significant fact by both the laity and the profession would be the means of saving many lives each year.

Nearly all cervical lesions produce excessive secretion. A less per cent are accompanied with bleeding. Any woman who complains of both a discharge and abnormal bleeding should be suspected of pathological tissue changes in the uterus and usually in the cervix. Discharge and bleeding always means disease. Hemorrhage occurs from superficial destruction of tissue. It should be taken as a basis for a logical deduction that hemorrhage as a symptom in a woman over forty should always be considered as due to malignancy until it has been positively excluded. Also, the recurrence of vaginal hemorrhage after the menopause has been established for some months or years is practically always due to cancer. Keeping this in mind and teaching the people facts regarding these symptoms would do much to prevent cancer.

Any woman complaining of these symptoms should be urged to have a thorough genital examination. It is possible to recognize cervical

pathology of a chronic, irritating nature by sight and touch. The ordinary cervical examination is not very searching or thorough. Too much is taken for granted. Good exposure and good light are very essential. The trained observer can detect readily those lesions which should be considered suspicious.

If we can create a highly suspicious attitude in our minds regarding cervical disease in the cancer age, no matter how insignificant it may seem to appear, and if we can repeatedly emphasize the importance of careful examinations annually, and more frequently if conditions indicate—microscopic if needed—then we will make distinct advance in the diagnosis, prevention and treatment of cancer of the cervix. The lesson which is to be drawn from the chronic irritation theory is plain. Chronic irritations such as have been mentioned should be corrected. So important is the lesson that not a few students of cancer have given it as their opinion that probably more cases of cancer can be prevented than can be cured.

#### TREATMENT

The treatment of cervical lesions is sadly neglected. Think of what it would mean if all the existing precancerous cervical lesions could be corrected within the next thirty days. It would mean an enormous drop in the death rate from cancer in the next five years. The lesions are seldom diagnosed and treated properly very infrequently. Genital lesions in the male are more frequently diagnosed and much better treated. This is because of false modesty and ignorance on the part of the patient and the lack of interest and concern on the part of the physician. A great deal can be done to prevent cancer but very little to check or cure it after it is well established. Prevention is always better than cure, and the way to greatly reduce the ravages of this terrible disease is to correct the lesions that predispose to it. It is the general practitioner that is first consulted in most instances and upon him falls the responsibility of recognition. One who looks upon these suspicious lesions too lightly may have occasion for regret.

The simple papillary forms of epithelial overgrowths are easily and well treated by the use of some form of cauterization, either chemical or electric. Carbolic acid and silver nitrate are useful, especially where there is infection. The properly used sharp curet is a very useful instrument in the treatment of most cervical lesions. After cureting, the surfaces should be treated frequently until healing has occurred. This will be slow in most instances and the physician, and patient must not expect final results too soon. It requires from one to four months to get good results, depending upon the lesion, method of treatment and the response to treatment. The Post electric cautery knife is one of the most serviceable instruments in the care of cervical lesions of

any kind. It is used after the method described by Dickison. To get good results it is necessary to destroy the glandular structures that harbor the infection. A very important feature of this work to insure a pleasing result is the after treatment. This must be done until the desired result is obtained. The conversion of a very large cervix with laceration, deep infection and a copious muco-purulent discharge into one more or less resembling the normal is very gratifying to all concerned.

There are other forms of treatment that are very useful. Curtis has called the attention of the profession to the use of radium in these lesions and has reported a number of cases successfully treated. It is a splendid method and gives good results in selected cases. It must be used with due respect to the function.

Electrical coagulation of the diseased tissues is now being recommended very highly as a means of destroying cervical lesions. I have had very little experience with it—insufficient to formulate an idea as to the final results.

In those cases where there is deep laceration, cervical hypertrophy with deep infection and discharge, surgical procedures are definitely indicated. Such cases constitute the surgical cervix. The method of operation must be determined by the findings in each case. If the uterus is otherwise normal, the Scurrmdorf or some of its modifications, are indicated. The method selected must eradicate the diseased tissues. In young women one must select the operation best suited to leave the genital tract in fit condition for further pregnancies. Trachelectomy should not be done during the child-bearing period. One very important point in the surgical treatment of the diseased cervix is the period of weeks of preliminary preparatory care. It improves the local pathological condition and greatly favors successful cervical repair.

In women, near or through the menopause, who have associated pelvic pathology with the cervical lesions, have definite indications for more radical surgery. It is better to do a complete removal than it is to try to patch up other derangements. Any diseased parts left behind are very likely to cause further disturbance.

The lot of the cancer patient, receiving the best known treatment, is unenviable. Her mental and physical torture is terrible and is made all the worse when she learns that her disease could have been prevented by relatively simple measures. Our problem as physicians is partly educational. We must insist on regular, periodic, complete physical examinations. We must be more active in a broader education of the public in the known facts regarding cancer.

In conclusion, we repeat that it is more important to prevent than to cure, and the object of this communication will have been accomplished

if it shall stimulate all of us who have opportunity to see these conditions to be more alert in the detection and proper management of suspicious cervical lesions. By correcting the lesions of the cervix, we will do much to rid the human race of one of its greatest enemies—carcinoma.

#### DISCUSSION

T. B. NOBLE, JR. (Indianapolis): I think that truth is an individual thing. It depends upon a man's observation because truth to a man is the best explanation of the facts that he has at hand. In this fight to eliminate carcinoma Dr. Walker has taken the right stand. I disagree in two main facts, first, that I see carcinoma of the cervix more frequently following laceration. Therefore, we have again the variation in individual observation; both correct. But there is a more important difference that we have. In his paper Dr. Walker says we do not know the cause of carcinoma. I say we do. Let us speculate and see if we do.

The normal cell lives and functions exactly as its endoenzyme lives and function. If you disturb the action of that enzyme or the material upon which it acts, in other words its surrounding chemistry, then you disturb or alter the life and function of the cell. As I see it, the cancer cell was at one time a normal, healthy cell. It becomes altered chemically by its surrounding pathology, an alteration of the circulation, an alteration of the flow of the fluids in the tissues and an alteration of the chemistry of the materials in the tissue fluids. If this material is so altered and the life of that cell so altered, the normal function of that cell no longer remains, but it reverts to its embryonic function, reproduction, and we have cancer.

We have in our body a chemistry similar to the antibodies which control infection and whose action we see every day. We call them anti-endoenzymes, for want of a better name, because we do not know them specifically. These at all times exert a control over every tissue of our body. When the anti-endoenzymic properties of our body are so disturbed locally that cell function is unrestrained and not inhibited, the cell tends to become embryonic; it functions as an altered cell, and you have a malignant cell, regardless of its classification living uninhibited at the expense of normal cells wherever it lodges in the body. Microscopically, it is a malignancy, a cancer. That understanding of cancer is essential to an understanding of the proper manipulation aimed towards a reduction of the disease. Certainly in this enlightened age we believe that prevention is far more beneficial than cure. The prevention should be aimed at eradicating any condition that will alter the normal chemistry of an existing cell. If we have a laceration or a polyp we should eradicate it.

E. E. PADGETT (Indianapolis): This subject of Dr. Walker's is one that we are never allowed



to lose sight of and rightly. There are two things to which I would like to call attention. He mentioned one, but he did not the other. He spoke of the influence of the clean, uninfected laceration as regards malignancy. We have believed and taught and practiced that it is better that all lacerations be repaired if they are infected, or if there is a little scar as the result of the laceration. In clean cases that scar left after repair is not as much of a precancerous lesion as the scar we make by amputation. I do not repair now every laceration I see. Another thing that Dr. Walker mentioned in passing is that it probably is better to remove completely the uterus in certain cases than to leave part of it. I have had occasion to have my attention brought in the last year to two cases in which supravaginal amputation was done and cancer developed in the cervix that was left. There may be cases in which it is necessary to get out of that abdomen quickly. In this case it is better to do your supravaginal amputation of the uterus and trust that nothing will happen, but the occasional cervix that comes up with malignancy after a supravaginal amputation is enough to warrant that it is better to remove the uterus completely if there is no contraindication than to do a supravaginal operation.

O. G. PFAFF (Indianapolis): When Emmett first discovered the meaning of scars in the cervix a great wave of cervical surgery swept around the world, some that probably was not necessary, but a great deal of it beneficial. We have been convinced that whenever a laceration takes place it should be repaired. Dr. Harvey was asked at a meeting when to operate on a laceration of the cervix, and he replied, "Not unless you can discover it." We have followed that rule for many years. Since then the pendulum has swung the other way, and for very many years lacerations of the cervix have been largely ignored. There is no doubt that 95 per cent of cases of cancer of the cervix arise in an organ that has been damaged by initial and multiple child-bearing; in other words, that these cases of cancer have arisen at or near the site of an old laceration of the cervix. Therefore it has been my habit for a great many years to say that in the child-bearing years a laceration of the cervix that is giving rise to any symptoms should be tolerated until the menopause, or if the time comes when the woman is convinced that she is not going to have any more children (a state of mind that does occasionally arise), it is our plain duty to operate on this case.

The time for operation is a thing to think about. As Dr. Padgett mentioned, the displacement of one scar by another is something to bear in mind. This thing of repairing a cervix and leaving a great deal of scar behind, as I have seen, does no good. In multiple tears I think it is folly to try to do an ordinary trachelorrhaphy. That cervix is torn in at least three directions and you will

generally meet insurmountable difficulties in attempting to remove all the scar tissue. The best thing to do with a cervix that has multiple tears is to amputate it unless the thing is so threatening that an entire hysterectomy is necessary. When a woman is in the child-bearing period with a lot of erosion and discharge you know you cannot repair it. The fact that she may bear more children does not count; the fact is that you want to prevent cancer, and if you do a high amputation you will have some scar, but of a different kind. It is in the vaginal tract and does not do so much harm. The only way to cure cancer with our present knowledge of the facts is to prevent it. We should not hesitate to amputate the cervix in a woman who is going to have more children because I have never found a case where amputation of the cervix has interfered with normal delivery.

One thing about amputation of the fundus, the so-called abdominal hysterectomy, I believe there is more mortality in enucleating the cervix in abdominal hysterectomy than there is if you amputate at the internal os and ream out the cervical canal. I doubt if more than one per cent of all the cervixes left behind develop cancer. There is a better floor left and the mortality is lower. Sometimes I amputate the cervix from below and then go above and leave a little piece of tissue.

Enucleation of the cervix in cases of endocervicitis is very good. Cauterizing the cervix anteriorly, posteriorly and bilaterally causes a coagulation without interfering with the epithelium.

M. R. COMBS (Terre Haute): The one thing in addition to the prevention of the precancerous lesion or the prevention of cancer is that we must not forget that the cervix is one of the foci of infection. We are always hunting for foci of infection. When searching for infection in the teeth and tonsils we should not forget that a great many conditions away from the genital tract are due to infections in the cervix. If we treat those infections we not only will help to prevent the formation of cancer but we will very frequently cure our patients of conditions that we did not suspect were connected with the genital tract.

M. E. KLINGLER (Garrett): There is one thing that has not been mentioned in the repair of the cervix and the prevention of after trouble in the cervix. We all know that the vaginal secretion is acid, while the uterine secretion is alkaline in reaction. The mucous membrane of the uterus is therefore used to form an alkaline secretion, and when you submit the exposed uterine membrane of a torn cervix to an acid secretion a sore cervix results. I make it a rule to see that there is vaginal mucous membrane in the vagina and uterine mucous membrane entirely within the uterus, and in that way eliminate cervicitis.

CHARLES STOLTZ (South Bend): Cancer has

been the great subject for discussion through decades. Varying conclusions have accompanied from time to time these discussions.

In my student days it was taught that there were only three points in the diagnosis of cancer of the uterus; hemorrhage, offensive odor and pain. A lesion of long standing argued against a diagnosis of cancer. We have long ago abandoned such erroneous teaching and yet that was taught only a third of a century ago. I do not know what is meant by precancerous conditions, but I do know of patients who have had cancer for years. There is one thing about cancer that we will all come to know sooner or later—once a cancer always a cancer. The trouble with the cancer situation is that it has been studied by the laboratory man and the surgeon from the curative standpoint, rather than by the biologist. Cancer is a biological problem—a purely cytological problem if you please, rather than a serological problem. We shall never get very far away from Cohnheim's dictum, that cancer is misplaced embryonic tissue plus irritation. That sounds awfully old to some of you, but some of the old things are hard to eradicate.

A rather recent emanation from a high pathological source that ulcer changes into cancer will not stand the test of time because nowhere in nature does one type of cells change into another type of cells.

It was said something like 2,000 years ago that "grapes do not grow on thorns, neither do figs grow on thistles." That is a good biological law today.

There is plenty of evidence of malignant growth wherever in nature there is cell activity, both in the animal and vegetable kingdoms. But wherever there is tumor growth or malignant growth, that growth keeps true to the type of the basic tissue from which it originates, as for instance, the sarcomas are always of the meso blastic embryonic tissue type, whereas carcinomas retain the tissue type of their embryonic origin.

Malignant growths may thus exist for a long time, resting for long periods of time, but those who think they change their nature indulge in a pathological conclusion without a biological consideration. There is only one cure for cancer and that is the destruction of the growth where that can be completely accomplished. All other so-called cures are mere palliatives.

C. J. ROTHSCHILD (Fort Wayne): It has been said that lacerations of the cervix play a very large roll in cancer, and I believe it is wise to stress the part they play. There should be a better and more comprehensive idea of obstetrics. The trouble is that most men have not had sufficient training in obstetrics. No one would think nowadays of doing surgery or any of the other specialties without particular training, but everybody does obstetrics. By a more thorough examination of the woman before term, and a better

prenatal study, many of these tears could be prevented. I feel that very often the precancerous stage of an ultimate cancer is largely our fault.

A. S. JAEGER (Indianapolis): It is unnecessary to further compliment Dr. Walker on his effort because its value is self-evident. For the past few years there has been a movement all over the country fostered by the American Medical Association to stimulate the interest of the profession and the laity in periodic health examinations. There is no individual to whom periodic health examination is more important than is the adult female, especially the one who has borne children. If all mothers were examined periodically, many of these precancerous lesions could be discovered early and usually very readily cured; and so the danger, whatever it may be, would be obviated.

In our desire to prevent cancer, or detect it early, some of us are frequently overenthusiastic, and we make a diagnosis without sufficient study of the case in point. It is agreed, gentlemen, that every man must, in the final analysis of a case, view the problem in the light of his own past experience; and in mine, I find frequently erosions of the cervix showing up shortly after delivery. Were every woman examined frequently for the first year following childbirth, or at least were a periodic health examination made, and this condition when present, would be detected, and this precancerous lesion, if such it be, could be cured.

Another thing! When we deal with these stubborn or intractable erosions of the cervix, some of us only think of some operative procedure as a cure; but I have found that when such cases are studied carefully, a rather respectable percentage prove to be lues, and after four weeks or so of intensive anti-leuitic treatment, there is no erosion left to operate upon.

In the last few years I have refused to allow myself to make a final diagnosis of cancer without first putting the woman through every possible test to disprove it; and I have found frequently that even in the absence of positive findings, that putting the patient on intensive anti-syphilitic treatment would cause the suspected carcinomatous lesion to disappear.

I rather suspect that many of the cases of permanent cures of cancer which were reported by men thirty years or more ago, if there had then been such a laboratory help as a blood Wassermann or spinal fluid examination, or if they had given the woman intensive treatment, the diagnosis would have been so evident that there would have been no need for operation.

THOMAS B. NOBLE, JR. Any one directing attention to a "cure" of cancer of the cervix through some therapeutic agent kills women by directing attention away from the precancerous lesion. Cancer of the cervix once developed is rarely, if ever, cured by any procedure. X-ray, radium, or



what-not, stimulates the autolytic enzyme of the cancer cell and will decrease the size of the primary cancer nodule by autolysis of the cells which are not in contact with normal tissues. No ray of any sort will destroy a malignant cell that is surrounded only by normal tissue. Rays from any source stimulate the enzymes of the distant metastatic cell and increase the rate of metastatic growth. Therefore we must come back to Dr. Walker's paper and eliminate the cause or source of supply of these malignant cervixes.

I must disagree with the doctor who said that cancer is the result of embryonic misplacement of cells. It is the product of normal cells altered long after embryonic life has ceased. Every cell has one function in embryonic life—that of cell division to form organs. It is controlled chemically in the body. That cell ceases to function as a producer, but functions in connection with any organ in which it lies, upon the cessation of embryonic life. Cancer must be treated exactly as we treat infection. In the war we learned that debridement or cleaning out with primary suture, gave good results. Treat cancer likewise, eliminate the source, and you eliminate the cancer. He who belittles the elimination of precancerous lesions impedes progress and nourishes tragedy.

M. L. CURTNER (Vincennes): In listening to the discussion it has seemed to me that when you are dealing with a precancerous state, you mean prevention of the cancer. I agree with the man who said we ought to have better obstetrics. It is my experience that most of the women who bear children have lacerated cervixes. How many of them come into your office for examination after they have given birth to one or two children who do not have lacerated cervixes? The child-bearing woman more often has cancer than the non-childbearing woman. If we have better obstetrics we eliminate many of our lacerations. There are a great many lacerations that no one ever gets to do anything with for the patient will not let you.

## HEART DISEASE\*

### ITS DIAGNOSIS AND TREATMENT

EDGAR F. KISER, M.D.  
INDIANAPOLIS

Three outstanding factors have contributed in large part to the increased interest in the study of the heart which has been manifest during the past decade. First, the World War which afforded opportunity in all of the countries involved for the physical examination of some twenty-nine millions of young and middle-aged men. Second, the influenza pandemic of 1917-19, which wrought terrific cardiac havoc, and third, the development and perfection of such instruments of precision as the

sphygmomanometer, sphygmograph, spirometer and, more particularly, the electrocardiograph.

These coincidental events have given such impetus to the study of the circulatory apparatus that cardiology has in a way developed into a new science, has given us an entirely new conception of cardiac disease. For many years we concerned ourselves almost entirely with a careful study of the function of the valves of the heart and were content when we had made a diagnosis of the competency or incompetency of this or that valve. While we still appreciate in full measure the importance of such anatomic investigation, we have come to recognize that the knowledge of paramount importance in the study of the heart is its evaluation as a power machine—of its ability to carry on—to meet the demands made upon it, often by an altered and pathological physiology.

Today a diagnosis of organic heart disease, to be intelligent, comprehensive and entirely satisfactory, must include:

First, the anatomic lesion, i.e., the valve or valves involved, and the character of that involvement; second, the etiology; third, the rhythm of the heart; and fourth, its competency.

The term heart failure has long implied that symptom complex which we now designate more specifically as *congestive failure*—*dyspnea*, oedema, cough, weakness, etc.—and has not included the syndrome which today we term *anginal failure*, recognition of which is absolutely necessary to an intelligent conception of heart disease. Myocarditis, it must be remembered, is rather a degenerative than an inflammatory process, and it is this chronic, progressive degeneration which we must keep ever in mind in our care of the cardiac cripple.

### THE ARRHYTHMIAS

Fundamental to a proper understanding of diseases of the heart is a knowledge of the arrhythmias. The work of Keith and Flack, His, Tawara, Perkinje, Sir Thomas Lewis and others, has resulted in a rather definite and precise knowledge of the action of the pacemaker of the mammalian heart, and of the path of the wave of excitation. This exact information has given us a practical, useable explanation of the cardiac arrhythmias, appreciation and proper evaluation of which are necessary for intelligent treatment.

Sir Thomas Lewis<sup>1</sup> has given us perhaps the most satisfactory classification:

1. Sinus arrhythmia
2. Premature contraction, or extrasystole
3. Simple paroxysmal tachycardia
4. Auricular fibrillation
5. Auricular flutter
6. Heart block
7. Alternation

It is not the purpose of this paper to discuss the minutiae of these several variations in rhythm, but rather to point out such details as are essential to a proper understanding of the practical points involved.

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Of greatest importance is a thorough understanding of auricular fibrillation. It is the "delirium cordis" of an older generation. Fibrillation is characterized by absolute arrhythmia. Lewis defines it as "a condition in which the auricles fail to contract *en masse*, the muscle activity consisting only of fibrillary twitchings; the normal and regular pulses transmitted to the ventricle are absent, while rapid and irregular impulses produced in the auricle replace them and produce gross irregularity of the ventricular action."

Typical auricular fibrillation is readily diagnosed. Characteristic is the absolute irregularity of the pulse. The apex beat is likewise grossly irregular and usually exceeds the pulse rate by twenty or thirty, and in occasional cases by fifty or sixty beats per minute. The difference between the apex rate and the radial is called the pulse deficit. Again quoting Lewis, "When the heart is beating rapidly—100 to 160 per minute—the grade of disorder is maximal. The pulse supplies indifferent news of the ventricular rate, many pulsations fail to reach it. The pulse is a medley of beats of many sizes, an intimate mingling of changing pauses; now the beats are almost uniform in strength and pacings; now feeble pulsations chase along rapidly; now the pulse is lost; now it returns with increased vigor."

The pulse rate in fibrillation is usually 120 or more per minute, and given a picture in which we have such a rate, together with the typical irregularity above described, the diagnosis of auricular fibrillation can usually be substantiated. The condition is most frequently encountered as a consequence of mitral stenosis, arteriosclerosis or goitre and is occasionally met with in heart disease of the rheumatic type in which no structural lesion can be demonstrated. The condition may be transient or chronic and the chronic fibrillator is usually a perpetual fibrillator.

The subjective symptoms in fibrillation vary within wide bounds. Some patients are not aware of their cardiac difficulty, while others are greatly distressed by their irregularity. This is governed largely by the degree of decompensation with which the fibrillation is associated.

It is in these cases that digitalis, or the drugs of the digitalis group, usually act as a specific. The response to treatment is at times as spectacular as is the response of diphtheria to antitoxin. The patient is often changed, within a few hours, from a miserable creature, fighting for every breath, to a quiet, comfortable individual who presents little or no evidence of his recent discomfort. Digitalis in any of its various forms may be employed. The powdered leaf has numerous advantages and few disadvantages. The Carey-Eggleson method of dosage and administration, or one of the various modifications of that method should be employed, i.e., massive doses of the drug in a relatively short period of time. Best results are obtained in patients who have had no digitalis during the two weeks prior to beginning treatment

and the drug should be pushed until a resting pulse of eighty or less is obtained, if that be possible.

Nausea and pulse coupling are the earliest and most dependable indications of approaching digitalis poisoning and are the most reliable indices for discontinuing the drug. Care should be used, however, to distinguish the nausea of decompensation from the nausea of digitalis overdosage.

Premature contraction, or extrasystole, is perhaps the most frequent of the cardiac irregularities met with in general practice and the peculiar subjective symptoms which patients experience as a result thereof, are, from the patient's standpoint, perhaps the most distressing. These subjective symptoms are variously described as a sensation of the heart "thumping"; or "turning over"; or "missing a beat" and at times there is actual precordial or substernal pain. Clinically the condition is characterized by an apparent missing or dropping of a beat at the wrist, but if the examiner listens at the apex while feeling the pulse, he will detect the apical beat, thus distinguishing this from the actual dropped beat of heart block.

Most text books dismiss the subject of premature contraction with the statement that it is very common, is usually the result of tobacco, coffee, dietetic error, indigestion, worry or what not and that it is of no clinical significance. While it is so that the condition is very common, and often has no clinical significance, it is nevertheless true that premature contraction may be encountered in association with grave myocarditis, and no case should be summarily dismissed as unimportant without the most painstaking and searching examination. If a very careful survey makes it possible to exclude other cardiac pathology, then the extrasystoles *per se* are not of serious moment and usually disappear upon removal of the cause, if that can be determined.

In the cases that can be classified as idiopathic, bromides, belladonna and sometimes quinidine are of value. Some cases will persist throughout life uninfluenced by any medication and, except for the unpleasant subjective symptoms, produce no untoward effect. It has long been taught that digitalis is distinctly contraindicated but only recently Otto and Gold<sup>2</sup> have reported excellent results from its use in selected cases.

Simple paroxysmal tachycardia is much commoner than ordinarily supposed. It is characterized by attacks of tachycardia developing suddenly and varying in duration from a few seconds to many days. Except for the rate there is ordinarily no change in the condition of the heart and many patients will continue their regular routine with no distress, but conscious of the rapidity of the heart's action. Others experience serious cardiac embarrassment. The cause is obscure and probably varies in individual cases<sup>3</sup>. It has been likened to migraine in its peculiar behavior<sup>4</sup>. The pulse rate is usually from one hundred and sev-

enty-five to two hundred and is characterized by sudden onset, absolute rhythmicity and abrupt cessation. About half the patients respond promptly to ocular or vagal pressure and some are relieved by assuming a certain posture which experience has taught them will bring relief. The other fifty per cent are unaffected by these measures and ordinarily the paroxysm continues unchanged by any medication until it has run its course. Quinidine is sometimes effective and occasionally bromides or other sedatives will give relief.

The other arrhythmias need be mentioned only in passing. Sinus arrhythmia is a physiological process, a variation in the pulse rate in keeping with respiration. It is more pronounced in children than in adults and requires no extended comment, except to emphasize that, being physiological, it may well be let alone and the patient not burdened with unnecessary and oft-times harmful medication or restraint.

Auricular flutter is not frequently encountered and the diagnosis can be positively established only by instruments of precision. It is the probable pathology in regular rates exceeding two hundred. If diagnosis be confirmed, the flutter may often be converted into fibrillation and then regular rhythm can be established by the use of digitalis.

Persistent heart block is always associated with grave cardiac lesions and is, it should be remembered, a frequent sequel of diphtheria. Here again instrumental aid is almost absolutely necessary in establishing a diagnosis but extreme bradycardia should always make one suspect block.

Pulsus alternans is of importance largely because of its grave prognostic significance. It is the accompaniment of advanced myocardial degeneration. Lewis says, "It is the faint cry of an anguished and fast failing muscle, which, when it comes all should strain to hear for it is not long repeated; a few months, a few years at most, and the end comes."

#### NEURO-CIRCULATORY ASTHENIA

During the early months of the World War a great many recruits presented a cardiac picture that led to a diagnosis of "heart disease" and thousands were relegated to the rear ranks who, in the light of further investigation, proved to be entirely able "to carry on." There was a remarkably striking similarity in the symptoms which they presented. Practically all had palpitation with or without physical effort, usually merely as a result of nervous strain. Most had dyspnea, breathlessness without cyanosis. They fatigued easily and complained of extreme exhaustion. Many had precordial pain, not the terrific, agonizing pain of angina but rather a sense of constriction and discomfort in the left chest. They usually complained of tenderness in the region of the left nipple and were annoyed by the presence

of a palpating finger or the chest piece of a stethoscope. Syncope, fainting from slight physical or mental strain and dizziness were common, as was profuse perspiration—sweating out of all proportion to the effort put forth. Headache was not uncommon and was sometimes of alleged intense severity. On physical examination it was found that in the vast majority of cases there was no demonstrable objective evidence of organic heart disease—at most a faint systolic murmur at the apex; no enlargement; no evidence of decompensation; in short nothing that would justify a diagnosis of serious cardiac damage. Recourse to the literature revealed that the elder DeCosta had described an exactly similar picture in connection with the soldiers recruited for the war of '63. After prolonged and careful deliberation, and repeated physical examination, particularly by the British, it was determined that these men presented, not a disease of the heart itself, but rather a disease of the nervous system which manifested itself by symptoms, nearly all subjective in character, referable to the action of the heart. In other words, merely a disordered action of the heart, "DAH" as it was commonly recorded, or more specifically, neuro-circulatory asthenia. The same picture is encountered every day in civilian life, in both men and women, and presents a diagnostic problem which at times is most difficult. The condition must be differentiated from organic heart disease, from early pulmonary tuberculosis, from toxic goitre and from some of the primary anemias. Diagnosis is usually made by exhaustive study and eventually by exclusion. The diagnosis having been established, treatment consists of measures directed to the relief of the nervous system. Reassurance is of first importance, a little mental healing mixed with drugs. The writer has on several occasions found the demonstration of a normal electrocardiogram of value in convincing the patient that he was not the victim of organic heart disease. Of drugs, the sedatives are perhaps most valuable. Digitalis is distinctly contraindicated—first because the cardiac condition does not demand it, and second, because the lay mind associates digitalis with heart disease and the patient's knowledge that the drug is being administered—and patients have a way of finding out what they are taking—may have a disastrous mental effect.

A full knowledge of neuro-circulatory asthenia is essential to an intelligent understanding of cardiac pathology and the physician must be ever on the alert in civilian as in military practice to distinguish the condition from organic disease of the heart.

#### SUBACUTE BACTERIAL ENDOCARDITIS

The standard text books on medicine make scant mention of subacute bacterial endocarditis although the condition was recognized and described as early as 1852 by W. Senhouse Kirkes. The disease has been presented under various titles—



"Chronic septic endocarditis" (Huebner); "Malignant rheumatic endocarditis" (Litten); "Chronic septicemic endocarditis" (Riesman);—but it is now generally conceded that Libman's designation "Subacute bacterial endocarditis" is open to the fewest objections. It is difficult to determine the frequency of the disease, for as late as 1921 Morawitz stated that, "It is not known to the profession generally." It is probably much commoner than is ordinarily supposed and the keen observer will find it sufficiently often that it cannot be classified as rare. It occurs most frequently between the ages of ten and forty, i.e., during the period of greatest incidence of valvular heart disease of the rheumatic type, and careful investigation reveals an antecedent infection by acute rheumatic fever or one of its cogeners in more than fifty percent of the cases. A striking feature is the tendency of subacute bacterial endocarditis to attack already damaged valves, a previously existing valvular lesion being noted in practically every case; nor does the bacterial infection, as a rule, change the pre-existing physical signs.

Various organisms have been recovered from the blood, but of 304 cases reported by Blumer<sup>5</sup> a streptococcus was found in 248 and of these 248, the streptococcus viridans was identified 169 times. Libman ascribes ninety-five per cent of the cases to the streptococcus viridans, and the remaining five per cent to the bacillus influenzae.

The disease most frequently affects persons with well compensated valvular lesions. The onset is usually insidious but cases occur in which the invasion is abrupt, with chills and fever or with arthritic symptoms or occasionally with sudden embolic manifestations. The great majority are first regarded as low grade toxemias of intestinal origin, or as influenza. Anorexia, extreme weakness and malaise are perhaps the commonest subjective symptoms. Fever of irregular type, usually of rather low range, is the rule. Chills and sweats may or may not accompany the temperature. During the early period of the disease the nutrition is ordinarily not much impaired but as the disease progresses emaciation is the rule. Cachexia is common, the skin assuming a characteristic greenish yellow tinge—*cafe au lait*.

A petechial eruption is so nearly constant as to be almost pathognomonic. The spots are found in the skin or mucous membranes, appear in crops and are present at some stage of the disease in nearly every case. They may, however, be few in number and small in size. They are of purple-red color, one or two millimeters in diameter, not elevated and do not disappear on pressure. Osler described an "ephemeral, painful, nodular, erythema" which affected the pads of the fingers and toes in seven of his ten cases reported in 1908. Tender fingers and toes were present in twenty-five of Bierring's thirty patients. Most observers, however, have not reported this phenomenon in such a great percentage of cases. Clubbing of

the digits is frequently encountered. Embolism in the larger peripheral vessels is quite common. Arthritis of varying degree is almost a constant feature of subacute bacterial endocarditis and the arthritic symptoms may at times dominate the picture.

There is no characteristic blood picture except that of a progressive secondary anemia with leucocytosis. The spleen is usually palpable and frequently tender on pressure.

The *sine qua non* of diagnosis is a positive blood culture. While patients are occasionally seen whose clinical picture almost certainly establishes the diagnosis of subacute bacterial endocarditis, one cannot be positive without recovering the organism from the blood stream. The Rosenau brain broth technique should be employed and repeated cultures made. Of seven patients seen by the writer within the past two years, in which the diagnosis was thought to be practically certain, a positive culture was obtained in four.

Because of its protean manifestations the disease must be differentiated from the great array of maladies which it may simulate—neurasthenia, influenza, malaria, typhoid, focal infection of obscure origin, neoplasm, pernicious or splenic anemia—and only long and careful observation with, as has been said, repeated blood cultures, will establish the diagnosis. The course of the disease is often marked with frequent remissions, and depending upon the virulence of the infecting organism, and the resistance of the patient, the duration may vary from a few weeks to many months. The prognosis is always exceedingly grave, the mortality ranging—according to various observers—from ninety-five to ninety-eight or even ninety-nine per cent. The drugs that have been used in the treatment of subacute bacterial endocarditis are legion but as will be noted from the mortality statistics, are of little or no value. Aside from the general hygienic and dietetic care, together with skillful nursing, little can be done to modify the course of the disease. Autogenous vaccines, when obtainable, are usually employed and of the numerous drugs that have been tried, sodium cacodylate is probably held in greatest favor.

#### CORONARY DISEASE

Masquerading under the *non de plume* of acute indigestion, coronary occlusion every year claims scores of active men in middle life who go to their eternal resting place, the victims of unrecognized cardiac pathology. Since the attacks often follow in the wake of a hearty meal, or of a dietetic error, and since the clinical picture is usually that of a digestive disturbance, the condition has long been complacently accepted as of gastric origin and so labeled. Sylvester McKean<sup>6</sup> has painted the picture so graphically that his description is quoted verbatim, "A man around middle life is suddenly stricken, perhaps in his sleep, with an intense sub-sternal or epigastric pain *that lasts* and is not relieved by nitrites or even by ordinary doses of

morphia. Signs of grave shock are present, anxious facies, ashy color, clammy skin and rapid, feeble pulse. The heart sounds may be irregular, or tic-tac in quality. A pericardial rub is sometimes found and is then pathognomonic. The blood pressure is comparatively low, and, if previous readings are known, a decided drop has evidently occurred. The temperature will probably be found elevated and the leucocytes increased."

Add to this excellent description that the attack is often accompanied by eructation and by nausea, that it frequently follows a hearty meal or unusual physical exertion, or is superinduced by worry or other emotional disturbance and we have a clinical picture, which indelibly stamped upon the mind, will make easy the recognition of a syndrome, by no means rare in general practice and whose prompt recognition is of vital importance<sup>7,8</sup>. The outstanding symptom is pain. It may be substernal or epigastric or may be referred to any part of the chest or abdomen, cases having been mistaken for gall bladder disease and operated<sup>9</sup>. The pain is described by the patient as "boring" or "constricting" or "burning" and is usually agonizing. Unlike the pain of true angina pectoris it is not paroxysmal but lasts for hours or days. Nor does it, as a rule, radiate to the shoulder and arm as does the pain of angina. This differentiation from true angina pectoris is at the present time of prime importance for these are not the cases in which operative interference—sympathectomy—is indicated.

In every case careful search for syphilis should be made, but if found to be an etiological factor, anti-luetics must be administered with the greatest caution. Small doses of mercury and the iodides should be given preference over the arsenicals for it is in cases of this character that salvarsan and drugs of like type, may precipitate an Herxheimer reaction. The prognosis in every instance is grave but many patients survive and may continue to lead fairly active lives.

#### GOITRE HEART

With the alarming increase in the incidence of toxic disease of the thyroid, no dissertation on heart disease would be complete without mention of goitre heart. Time was, when the diagnosis of goitre was made only when the typical picture of Basedow's disease presented, with its characteristic exophthalmos and enlargement of the gland, but with our increasing knowledge of toxic adenoma and iodine hyperthyroidism<sup>10</sup> every patient with tachycardia should be the subject of careful investigation. In every instance where the tachycardia cannot be explained by other demonstrable pathology a toxic thyroid should be suspected and the metabolic rate determined. Early recognition of toxic goitre is of paramount importance in order that treatment may be instituted before serious damage to the heart muscle has resulted.

Perhaps more important than a knowledge of the diagnosis and treatment of diseases of the heart is a correct conception of the potential cardiac cripple<sup>11</sup>. Patients with heart disease may be divided, according to etiology, into two great groups—those whose ailment is the result of syphilis, and those who owe their disability to acute rheumatic fever or disease of like type, chorea, tonsillitis, streptococcic infection and perhaps influenza. Knowing the role of these disorders in the production of heart disease it behooves the general practitioner, the pediatrician, and the syphilologist to be ever on the alert to detect the earliest manifestations of cardiac pathology. Here, certainly, prevention is a thousand times better than cure and a timely tonsillectomy, a change in occupation or in environment, regulation of habits or mode of life, will often render a more lasting service than will a dose of digitalis.

Preventive medicine is making rapid strides. Concerted action and intelligent direction have, within the past few years, reduced the mortality from pulmonary tuberculosis far beyond the fondest dreams of the pioneers in that field, and it is the hope of every cardiologist that similar efforts will in the very near future effect as happy results in reducing the death rate from organic heart disease.

#### DISCUSSION

ROBERT M. MOORE (Indianapolis): I wish to thank Dr. Kiser for his interesting paper, and to stress a point or two as I see their importance in general practice.

First, the importance of diagnosis, and here we have three points to consider: the etiology, structural change or changes, and functional disturbance. Unless these points are carefully worked out, intelligent treatment cannot be instituted.

I think too many of us are prone to listen to the heart without obtaining the patient's history, perhaps detect a murmur and inform the patient he has "heart leak." This term should be struck out of medical nomenclature, as this remark usually cripples a patient mentally. Every physician here has in mind a patient who is afraid to go out of his home or go to sleep because of fear resulting from some statement made about his heart. I think we should always word our phrases so we will not instill fear.

The next point, it is well known that in auricular fibrillation when the patient has fibrillated for some time, there is a possibility of a thrombus in the auricles. We digitalize to control the rate, which is important, but we do not warn the patient against sudden strain, which often increases the rate suddenly and death often results from thrombi.

As to pain in the upper abdomen simulating other diseases, it is true that surgeons do sometimes operate in cases of this type. I think it was Libman who brought out the value of a careful white count made within one hour after an attack, when the patient will have a leukocytosis.



between 12,000 and 15,000. I consider this very important and believe it should be kept in mind, for I know of no condition in the abdomen which will cause such an immediate leukocytosis.

These, in addition to the other points which Dr. Kiser so well described, should always be kept in mind.

C. J. MCINTYRE (Indianapolis): It would be impossible to discuss all the phases of this timely paper, and I should like to confine my remarks to prevention, and carrying out the doctor's parallel between the treatment of tuberculosis and heart disease. Twenty years ago when a diagnosis of tuberculosis was made the patient and his family felt that the death warrant had been signed. As the result of Koch's work in isolating the tubercle bacillus clinics were established, the laity were educated to the fact that tuberculosis is a preventable and curable disease when the diagnosis is made early, and great progress in checking the disease has been made. While there is no bacillus for a modern Koch to discover in heart disease, yet Mackenzie, by devoting his life to the study of graphic records of heart disease, has taught us to diagnose these cases early. It is our duty to get in step with the modern trend, abandon our skepticism, and teach the laity that heart disease is both preventable and curable, if the diagnosis is made early.

Formerly when patients presented themselves for diagnosis little attention was paid to their early complaints, unless the heart was filled with murmurs, the extremities with edema, and the respirations were labored. Usually they were told that the condition was functional, or that they had some digestive disturbance.

Speaking of function, we wonder if any other part of our anatomy were so disturbed whether we would abandon our effort to arrive at a satisfactory diagnosis. Today the trend is to search the patient's history for past diseases, past habits and past occupations which may have a bearing on their disability. The pulse is studied for variations in rate, rhythm and volume. If necessary, the x-ray or the electrocardiograph is brought into use in order that we may identify the manifestations which may later develop into cardiac bankruptcy. There is no claim that heart tissue can be regenerated any more than the men working with tuberculosis claim that lung tissue may be regenerated. We not only have been searching our cases for focal infections in order that they may be eradicated, but perhaps one greater service that we may render the laity is that we prolong their convalescence following acute infections. Even the minor infections should be watched more carefully than in the past. It has been the boast of many physicians that they have gotten their patients on their feet in so many days after an infection. The word convalescence means to become strong, and it should be our desire and wish that our patients should rest following any acute infection, whether it may be mild or severe. We

should insist that our patients shall rest until they regain their strength. I think perhaps this is the most important thing for us to do today, to guide our patients during youth and adolescence, at which time most of the heart symptoms develop. They frequently follow tonsillitis, chora and influenza—not that the influenza bacillus may injure the heart valves particularly, but patients should rest after such infections in order that they may regain their strength and no damage be done to the heart muscle. I think if any point about prevention should be stressed it is this particular point, that we should watch and guide our patients during convalescence. Our quarantine measures protect them for a time, but I believe it is far too short. It is difficult for parents to realize the importance of keeping their children in bed a sufficient length of time for them to become thoroughly strong.

ADA F. SCHWEITZER (Indianapolis): I wish to emphasize one or two points on cardiac dysfunction in childhood. In examining children after epidemics have passed through communities I have known as high as fifty per cent of the children to have some damage to the heart along with damage to the rest of the body from the disease with which they had suffered.

More attention is needed during convalescence than is usually given. It is customary after recovery from measles and other infections to allow children to play and to resume other activities. This should be done gradually. Children are also allowed to go home the same day a tonsillectomy and adenoidectomy are performed and after twenty-four hours become active again. Not enough attention is given to the shock that follows such operations in childhood. On the other hand parents have been frightened by having the physician tell them about a heart lesion, and in one instance that I recall a child was not allowed to engage in activities she would have enjoyed over a period of two years.

The doctor's supervision should be continued until the child has thoroughly recovered, and he should decide as to rest, diet, activity, etc. In this way I am sure we can prevent many cardiac complications.

HERMAN M. BAKER (Evansville): I think if we, as practitioners, would bear in mind the physiology of the circulation a little more as we see these heart cases it would be of great assistance to us in expressing an opinion. We should remember that the circulating blood is the transport system of the body, carrying nutrition to the various structural areas and carrying away waste. After all, that is all that the blood is, a transport system with the heart acting as the power plant, if you please. As long as the transport system is working, as long as it is carrying the nutrition to the body cells and carrying away the waste, we need not worry about these cases or get excited over them.

I wish to emphasize what Dr. Schweitzer said concerning the prevention of heart disease in children, and most especially do I wish to call attention to the low grades of rheumatism in childhood. These children are brought in so often and the parents complain that they have "growing pains." From the investigations of Swift and his co-workers in regard to the rheumatic infections of childhood we know that these so-called growing pains frequently are manifestations of rheumatism, of a type that causes comparatively little discomfort and may or may not be accompanied with rise in temperature. When a child is brought to you with the complaint of growing pains don't tell the parents to take the child home and he will be all right in a short time. Remember that these pains may be rheumatic, and that it is high time to begin the prevention of damage to the heart.

Dr. Kiser's paper was excellent, one that the section might well spend an entire day in discussing if time would permit. In regard to coronary block, which he brought out, I might say in closing that it has recently been my experience to see a patient with coronary block which had been diagnosed and operated upon as acute gall-bladder disease. The patient died on the fourth day following operation.

CHARLES F. VOYLES (Indianapolis): I wish to emphasize one point, and that is the great difficulty we sometimes have in making differential diagnoses between angina pectoris and gall-stone disease with atypical symptoms. I recall one case in which a diagnosis of angina pectoris had been made. Some symptoms indicated that, but the symptom of pain precipitated by exercise was almost lacking; most of the symptoms of gall-stone disease were lacking. The x-ray examination showed nothing definite. There was no history of syphilis, the blood and spinal fluid Wassermann reactions were negative. However, the patient was put on antisyphilitic treatment as a therapeutic test and improved symptomatically for a time. Then no further improvement occurred and the test was regarded as negative. We considered a diaphragmatic hernia, but this was ruled out. The case was further complicated by the fact that the patient had an achylia gastrica, but when such patients are put on proper treatment they are not likely to have symptoms severe enough to confuse the diagnosis. The two points that led to the diagnosis were that the patient did not have anginal pain precipitated by exercise, and the fact that later in the case pain developed in the chest posteriorly. A diagnosis of gall-stone disease was made, the heart symptoms were minimized, and a surgeon was willing to do what he regarded as an exploratory operation. The gall-bladder contained a few large and many small stones and it seemed that we had explained the anginal pain. The patient got along well for a few days and then her vitality ran low. There was nothing in the field of opera-

tion to explain her state, and about seventeen days after operation she developed severe cardiac distress and died. She had both gall-bladder and heart disease. The heart was already damaged more than we realized and although she had suffered from gall-stone disease she died of the cardiac condition.

EDGAR F. KISER (closing): I hesitate to take any more time but the subject is of such tremendous importance that we might well spend the whole morning on heart disease. I think I can do nothing better than emphasize coronary occlusion. I am interested to know that Dr. Baker has recently seen a case, and that Dr. Voyles had a patient with this disease and gall-stones as well. I think in digestive diseases associated with epigastric or substernal pain, in patients beyond middle life particularly, we should be most careful to rule out coronary occlusion before we diagnose gastric disorders. I believe I am safe in venturing the opinion that the cases of death reported as due to acute indigestion are wrongly diagnosed in the great majority of instances. I think there is practically no such thing.

Dr. Moore suggested that we be very careful in discussing these things with patients and avoid the use of the term "heart leak," so far as we can. The avoidance of that phrase and of "heart murmur" is of vast importance, particularly because of the tremendous nervous influence in every instance.

I was particularly pleased to hear Dr. McIntyre say that we no longer brag about the short period of convalescence in our cases of acute infections. No greater error could be made in these cases than to get the patient up within a short time following any acute infectious process, for we know now that acute rheumatic fever and allied diseases are responsible for the vast majority of cases of heart disease.

I thank the section for its cordial reception of my paper, and the discussants for their kindness.

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INFECTIONS OF THE NOSE AND NASAL  
ACCESSORY SINUSES

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It is obvious that nothing more than a sketch of this subject can be given in one short paper. In order to have a practical working idea of the nose and accessory sinuses it is necessary to visualize the respiratory mucous membrane in its entirety. No single part of it can be completely segregated in its physiology or pathology. The nose, lacrimal ducts, frontal, ethmoid, maxillary and sphenoid sinuses, the eustachian tubes, middle ears and pharynx comprise what is termed the upper respiratory tract. The tracheo-bronchial tree is the lower. All of these cavities are lined by one continuous mucous membrane. The histology varies to meet the requirements of the several parts, but disease in any part has its effect upon the entire organ. Also a disease of this mucous membrane must have a profound effect upon the entire human mechanism, and in reverse order so must disease of the body generally have a like effect upon the respiratory mucosa. This interdependence of parts is a much neglected factor in the treatment of sinus disease.

Infections of the human body occur because of a relative disproportion between the virulence of the infecting organism and the infected body; but for the time we will omit the relative virulence of the bacteria or the infecting organism and consider the human body only.

As to the etiology of nasal infection, we have two factors: First, a lowered general resistance; second, a lowered local resistance in the respiratory tract itself.

As to the first, or lowered general resistance, any disease or physiologic disturbance which produces lowered cell resistance will permit of mucous membrane and sinus infections. Tuberculosis is a notable example. Malnutrition in infants and children produces a mucosa subject to infections, and a history of difficult feeding is common in these cases. Muscular atony or instability in the blood vessels, whether produced by the chronic diseases in a direct weakening of the musculature, or by a disturbance of the nerve control, permits engorgement of the vessels and subsequent trouble. An unstable nervous mechanism may be due to a food or pollen hypersensitiveness. It may be due to a chronic colitis or a pelvic disorder which would demand correction before the nose could be cured.

The second factor entering into the etiology, and by far the most frequent in the cause of sinus disease, is the local one and can be described by the word "obstruction." Obstruction is produced in many ways, but suffice it to say here that whenever it occurs in the respiratory tract there is first irritation, followed by infection of the mucous membrane. The infection produces swelling which in turn causes more obstruction, and the vicious cycle is established that is so difficult to

stop. The most common causes of nasal obstruction are:

1. Foreign bodies. An occasional case of purulent nose and sinus disease in children presents itself which is cured by removing a shoe button, chewing wax, stones and numerous other articles from the nasal passage.

2. Developmental defects. Imperforate nasal choanae, while rare, do occur and require appropriate surgical attention. Lack of spreading of the maxilla with a narrowed nasal passage accounts for some. The individual with prominent incisors, high arched palate, lacks breathing space and in addition usually has a deflected septum to further complicate the picture. This case will almost certainly develop nose pathology. The treatment here should be preventive and must depend upon spreading the maxilla by dental appliances in early life. Spreading of the maxilla will widen the breathing space and is essential for the cure of this type of case.

3. Hypertrophy of the post-nasal lymphoid tissue. Obstruction by the adenoid from non-infectious hypertrophy is not common. It occurs in the cases which present the so-called lymphoid tendency and may be the result of endocrine disturbance. Early and if necessary repeated adenoid removal is indicated here, but caution should be observed that the thymus gland is not of sufficient size to cause trouble during anaesthesia.

4. Nasal infections in early life, such as repeated colds, the acute exanthemata, influenza epidemics, etc., cause hypertrophy of the adenoid and tonsils and a thickening of the ethmoid area. This obstruction causes a large per cent of sinus diseases in children. It is not necessary that an adenoid shall entirely obstruct the nasal passage and produce the typical mouth breather to cause trouble. Chronic infection in the adenoid and tonsil tissue produces a permanent congestion and fullness in the nasal and post-nasal mucosa which is obstructive.

The upper part of the nasal passage is very narrow, being comparable to the apex of a very acute triangle, the inner wall of this triangle being the septum and the outer the ethmoid bone. The ethmoid bone contains cells which are present at birth. It also forms the superior and middle turbinates. The middle turbinate, if enlarged, may obstruct the opening of any or all of the nasal sinuses. Infection and swelling in the ethmoid area immediately causes obstruction. If continued there is soon a periostitis, as the mucous membrane is quite thin. This may progress to an actual empyema of the cells or to an inflammation and necrosis of the bone itself. Since the middle turbinate swells when any other part of the ethmoid bone is swollen, the other nasal sinuses may follow an ethmoiditis in rapid order. It is believed by Dean, Mullin, Shea and many others that an ethmoiditis precedes involvement of the other sinuses in children.

In the adult, sinusitis is still a result of obstruction, but here we have two classes of cases: First, those in which the disease began in childhood and has persisted over a long period of time. This type has hyperplasia of the tissues and possibly polypoid degeneration of the mucosa, or even bone necrosis. A large percentage of adult cases make up this class and produce some of the asthmatics, hay fever and chronic bronchial complications. The second class is due largely to obstruction from deformities or deflections of the nasal septum. The exact cause of deflected septa or spurs is debated. Several theories have been advanced and it is probable they all account for their share. These deformities appear in adolescent and early adult life and seem to grow worse over a period of years until they produce obstruction. The vicious cycle is then established and if permitted to continue there ensues closure of the sinuses and infection.

*Diagnosis:* The diagnosis of sinusitis is not easy and frequently requires a prolonged period of observation. All diagnostic indications and symptoms vary, from mild to very extreme. The chief ones probably depend more upon the freedom of drainage and the acuteness of the infection, or, in other words, upon the amount of pressure present. In describing the symptomatology of sinusitis I am inclined to divide the cases into those under ten or twelve years of age, and those older. While all the sinuses, except the frontal, are developing before ten years, they do not have the individual pain, tenderness, etc., that occurs later in life.

*Pain:* It must be remembered that the trifacial nerve is the nerve of sensation to the entire head, and while there is a tendency for the pain of a given sinus to localize in that area, it may be referred to other parts.

In cases under ten years sinus pain is not an outstanding symptom. When present it is usually complained of as a headache or fullness between the eyes or in the frontal region. It occurs in the morning and mid-day—rarely in the evening. In the cases over ten years there develops a more specific type of pain for each sinus. Ethmoid pain is felt between the eyes as a pressure, and as a dull ache in the temporo-parietal region.

Frontal sinus pain is diffuse over the entire front and top of the head on that side, with marked tenderness over the involved sinus.

Maxillary pain is felt in the upper maxilla and the teeth. In the chronic types, particularly, the pain is often located over the frontal sinus of the affected side. Here a lack of frontal tenderness helps in a differentiation.

Sphenoid pain is usually felt in the top or back of the head and is often described as a full, throbbing or expanding sensation not unlike that of intracranial expanding lesions.

*Temperature:* The temperature in all ages may be high in very acute infections. Acute sinusitis in

children may be accompanied by a temperature rise from  $102^{\circ}$  to  $104^{\circ}$ . The chronic cases may run for months without any temperature rise. The typical temperature curve in an average subacute or chronic case is a daily rise of from  $\frac{1}{2}^{\circ}$  to  $1\frac{1}{2}^{\circ}$ , which persists over a long period of time, frequently months. The temperature as well as the physical findings in the chest so nearly resemble tuberculosis that differential diagnosis is difficult at times.

There is some evidence of toxemia or focal infection in each instance and any organ or part of the body may be infected from the sinuses. The most common symptoms accompanying sinus disease are complications in the respiratory tract such as frequent colds, chronic bronchitis, recurrent bronchial pneumonia, bronchiectasis, and asthma.

Swelling of the nasal mucosa and turbinates is a constant accompanying sign.

Pus and sero-purulent discharge may or may not be present. If pus can be seen coming from a sinus it is important. Post-nasal discharge is common, and foul smelling discharge is indicative of serious sinus pathology. There are many cases of non-suppurative sinusitis in which a thickened mucosa is the chief gross symptom.

Transillumination is valuable in detecting sinus pathology, but one should not rely entirely upon its findings alone. A transilluminator is valuable in proportion to the time and study given it, and should be a familiar instrument to every man doing general medicine. The x-ray is another indispensable aid in sinus work and while there are chances for error, they decrease as more careful study is accorded the x-ray findings.

*Treatment:* The primary cause of sinus disease is obstruction, or lack of aeration and drainage. Every remedial measure must be directed toward relieving obstruction with the least possible irritation or trauma. The nasal mucosa is not so plentiful that parts can be destroyed or removed without some damage to the patient. It is highly sensitive and irritating drugs may do harm when good is intended. The treatment in children and adults varies sufficiently that it is advisable to consider them separately.

If there is obstruction from hypertrophied or infected tonsils and adenoid they must be removed before progress can be made in the nose. A complete adenoidectomy is quite essential. This measure alone cures most sinus infections in early life. If the disease continues it is necessary to shrink the mucous membrane to permit the passage of air and allow drainage. Suction or negative pressure is then applied and soothing antiseptic preparations instilled or sprayed over the mucous membrane. This routine must be followed religiously over a period of months in some cases.

If the maxillary sinus is involved, irrigation by needle puncture or a naso-antral window under the inferior turbinate is indicated. Only a very small



percentage of sinusitis in children demands any radical surgery for its cure.

An important factor in the treatment is to get the remedial agent up into the swollen ethmoid area. This can be best accomplished by placing the patient on the back, allowing the head to fall directly back over the edge of the bed or table. This permits dropping the medicine directly down into the apex of the triangle which is the ethmoid area.

The treatment of adults likewise is directed toward eliminating obstruction, then draining and aerating the sinuses. A deflected septum, an hypertrophied turbinate, or polypoid growths must be corrected surgically. A periostitis causing narrowing of the nose must be healed. Not until the nasal passages are free is it possible to accomplish much in treating sinusitis. The sinuses must be drained of pus by suction or irrigation, or by an opening large enough to have continued and complete drainage. If there has been prolonged disease sufficient to cause hyperplasia or polypoid degeneration of the sinus mucosa, it must be removed by one of the methods of so-called radical sinus operation.

General treatment is of the utmost importance in sinusitis. After aeration and drainage are established there must be a systemic resistance built up before a cure can be had. The consensus of opinion today favors the use of agents rich in vitamin—A products, cod liver oil being the outstanding preparation. Other tonic or stimulative treatment may be used if indicated in the particular case. A properly balanced diet is essential.

Regulated exercise with rest periods at intervals during the day must be had. In acute or extreme cases absolute rest in bed is indicated.

Every sinus case should be protected from exposure to chilling or drafts. Any chilling of the skin surface of the body produces an accompanying congestion in the nasal mucosa, and if prolonged much harm can be done. Warm, fresh air is indicated as nearly as possible at all times. Extreme cold in sleeping rooms, or riding in a wind, is harmful.

After all is said and done the best treatment is prevention, and the greatest factor in preventing sinus disease is to avoid infections. In most cases of sinus diseases in children which demands any decided treatment there is a very definite source for repeated infection in some other member of the family, usually one or both of the parents. This must be looked for and eliminated or much trouble is experienced in effecting a cure in the child.

#### DISCUSSION

LOUIS H. SEGAR (Indianapolis): I believe Dr. Carmack has presented one of the most important subjects confronting those of us who take care of children. Toward the last of his paper he said that the most important thing in the treatment of sinus infection in children was its prevention, and

elaborated upon that statement by saying that that meant keeping the young child away from nose and throat infections. Much has been done to reduce infant mortality in the United States by the man who spent a million dollars popularizing pasteurized milk. The next millionaire that comes along who can show Americans as a nation the dangers of infection from common cold, will do as much as Nathan Strauss did in reducing infant mortality. Sinus disease is a cold that does not get well, and if my ear, nose and throat friends are right, a cold that does not get well, that becomes a sinus infection, is apt to remain a sinus infection forever. The important thing in the treatment of sinus infection in children is its prevention, and the important thing in its prevention is the education of the nation as to the infectiousness of the common cold. The baby should be prevented from obtaining nasal and throat infection from its mother and father at all costs. In our house, where there are two babies, a common cold in an adult is a quarantinable affair—nobody who has a discharging nose goes near the babies. And the sooner someone comes along to advertise that fact and put it on the billboards and publish it in the magazines, the sooner will this subject of sinus disease be relegated to the background, as were those diseases that were due to impure milk.

This is a subject upon which I feel very strongly—the necessity of teaching the people that colds are contagious, that the common cold to the baby is a dangerous disease, dangerous acutely, and dangerous from the standpoint of ultimate chronic disease.

C. NORMAN HOWARD (Warsaw): I would like to emphasize that portion of Dr. Carmack's good paper dealing with acute frontal sinusitis.

For the most part, these patients are comfortable when first arising, but, after being up two or three hours, they have severe pain in the frontal region. This pain persists until three or four o'clock in the afternoon when it rather suddenly ceases, only to recur again the next day.

These periodic pains were formerly called "sun pains" but now we know they usually mean that secretions are trying to find their way down from the frontal sinus through the naso-frontal duct to the nose.

On arising in the morning, these patients should irrigate the head with a quart of warm Ringers solution containing bicarbonate of soda, or a simpler mixture can be made by putting a teaspoonful of soda and a teaspoonful of salt into a quart of warm water. This soda and salt solution is then put into a fountain syringe suspended about eight inches above patient's nose. A nasal tip is placed in one nostril and, while the patient holds his head well down over the basin, the entire solution is allowed to run up one nostril, to the epipharynx and out of the other nostril.

This should be followed by an oily spray. I have found that eight grains of camphor and eight

grains of menthol to the ounce of albolene used in an atomizer makes a very satisfactory solution for this condition. The patient should spray it thoroughly into the nose, taking deep, quick breaths while doing so, thus trying to draw the vapor as far up toward the frontal sinus as possible. He should continue to compress the bulb of the atomizer until he gets a little taste of the medicine back in the throat.

The above procedure gets rid of secretions and helps to shrink the nasal tissues, thus increasing the chances of greater aeration for the frontal sinus and making easier exit for the discharge from the frontal sinus.

To relieve the immediate severe pain, codein and morphine do not appear to act so well as phenylcinchoninic acid. It is well, I think, to give 15 grains immediately on rising,  $7\frac{1}{2}$  grains an hour before the pain generally starts, followed in an hour by another  $7\frac{1}{2}$  grains, then  $7\frac{1}{2}$  grains every three hours for the rest of the day. When phenylcinchoninic acid is taken, I believe it should be followed by a full glass of water. The patient should also receive a good cathartic and should not be trying to work.

If the above procedures are not sufficient to relieve the condition, then I have found it of value to remove the anterior end of the middle turbinate which is apt to be blocking the naso-frontal duct in these cases.

RALPH S. CHAPPELL (Indianapolis): There are two points I wish to emphasize. First, the nose is a regressive organ, and when we speak of the nose we mean the nose and accessory sinuses. A regressive organ is always subject to great variation and to much pathology, consequently we are dealing with a varied condition and these cases must be studied individually. It is hard, indeed, to classify; it is hard to read the symptomatology in these cases because they are so varied.

The second point I wish to emphasize was mentioned by Dr. Segar—prevention. That is the watchword in modern medicine. These cases of sinusitis are the result of colds. "Despise not the day of small things" is as true in medicine as in scripture, and the study of the common cold is a rich field for future research.

C. H. GOOD (Huntington): It seems to me that the general practitioner should say something because we see ninety per cent of these cases of frontal sinus infection. Dr. Carmack's paper is very practical. The goal of the profession now is preventive medicine, and we all know that colds furnish the greater part of the business we have. Of course we cannot cure all of them, but this is an important subject and we should do the best we can along these lines.

G. D. MILLER (Logansport): The most important feature that has been mentioned is preventive medicine. If you turn to the second chapter of Genesis you will find that, "The Lord God formed man of the dust of the ground and

breathed into his nostrils the breath of life; and man became a living creature." Preventive medicine is the thing. The nose is the breathing apparatus, and it is up to the general practitioner, as well as the specialist, to see that these organs are taken care of.

JOHN W. CARMACK (closing): Very valuable experimental work has been done at the University of Iowa relative to the diseases of the respiratory tract. The findings indicate that some chronic change occurs in the body when diets which are deficient in vitamine-A are given. This chemical change permits, or produces pathology in the mucous membranes. These facts help to substantiate the point that I wish to emphasize—that in the treatment of sinus and upper respiratory infection a successful outcome cannot be had alone by surgery, or by local treatment to the part involved. Intensive study and correction of the diet, hygiene, habits, etc., are often necessary for a cure.

### CHRONIC LYMPHOID LEUKEMIA

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Lymphoid leukemia is a disease characterized by a permanent increase in the lymphocytes of the blood, associated with a hyperplasia of the leucoblastic tissues. An accurate knowledge of this condition has been obtained only since microscopy has been possible, and even in comparatively recent years the chronic form of this disease has been confused often with the myeloid type of leukemia. The acute type, with a rapid course to an *exodus fatalis*, was early recognized and differentiated from the other types.

The chronic type of lymphæmia is a comparatively rare condition and often escapes detection until late in the course of the disease. It occurs in the ratio of about 1:10 to the myeloid type. Minot, Cabot, Vogel and Ward report in all 256 cases which they have observed personally or found in literature.

The disease is found more often in males than in females, the ratio being 3:1. The age incidence is from forty-five to fifty-four years, or about ten years later in life than that of the myeloid form. The diagnosis is made, according to Minot, on an average of 1.4 years after the first symptoms are present and 0.55 years after first consultation with a physician. The length of life after a diagnosis is made, averages 3.5 years irrespective of the type of treatment used.

No especial predisposing causes are recognized but in the cases reported below, acute respiratory infections occurred immediately preceding the onset of the disease, and should be considered.

The symptoms usually presented are malaise and weakness of any degree, and of gradual onset. This weakness eventually interferes with the patient's usual activities. This condition is accompanied by an enlargement of the axillary, cervical and inguinal glands. The same enlargement



often involves also the internal lymph glands, the tonsils, mucous membrane follicles, the bronchial and retro-bronchial lymph glands. The spleen is almost always distinctly enlarged, although not as great in size as is usually found in the myeloid type of the disease. Frequently this generalized enlargement of the lymphatic glands is the occasion of the initial visit to a physician.

As the disease progresses, angina and ulcers of the mucous membrane of the mouth, nose and throat may appear. There may be prurigo-like skin infections, albuminuria, retinitis, and most marked of all, a tendency to hemorrhage. The latter symptom is more marked in the acute type, but occurs also in the latter stages of the chronic. Toward the last, the anemia becomes more marked, the face becomes dull and pale. There are severe headaches and the temperature may rise to as high as 104 degrees. The patient becomes bedfast, however, only late in the course. A secondary infection frequently is the cause of death.

The diagnosis is made by the blood count and differential count. The number of white cells frequently is up to 200,000 or more. Most of these are the usual small lymphocytes, but very much larger ones and atypical cells are often found. The red cells count frequently is very low; one case reported below showed 1,708,000 cells.

In the treatment of this disease, arsenic was formerly used in large doses, but unsuccessfully. Benzol and x-ray therapy have given the best results. Exposure of the lymphoblastic tissues to x-ray causes marked remissions in the disease and lowered white cell counts, thus enabling patients to attend their usual vocations indefinitely. In the later stages of the disease these remissions become shorter, the effect upon the blood count becomes less marked, and the patient soon becomes bedfast.

Early in the disease, when the patient responds to x-ray therapy, the improvement in sense of well-being is very marked. The fatigue disappears. The lymph glands become smaller and may even disappear entirely. One feature, marked in the cases reported, was the increase in size of the lymph glands and increase in white cell count immediately following x-ray exposure, this increase lasting for about twenty-four hours.

Minot states that under x-ray therapy, forty-seven percent obtain moderate improvement, thirty percent obtain slight and twenty-three percent obtain no improvement. In most cases there appeared to be a definite relationship between the hemoglobin and therapeutic results, the lower the hemoglobin the poorer the response to therapy.

Case 1.—Female, age sixty-six years, seen first March 10, 1923. A mother died at ninety-four years and a sister at fifty-six years, both with splenic enlargement. She had pneumonia a year previously, followed by general cardiac weakness for several months; slight rheumatic tendencies. This illness began three months before patient

consulted me, as a bronchitis and pneumonitis, gradually increasing weakness and fatigue; anorexia, nausea, herpes, pharyngitis and slight jaundice all constantly present. All else negative. The pharyngitis was mild. There were a few scattered rales in the lungs, a distinct aortic systolic and presystolic murmur and general tenderness over the liver and spleen. The liver edge was found one inch below costal margin and the spleen, soft, mushy, extended down to level of umbilicus, six inches below costal margin and well into the axilla. Cervical and inguinal glands were small. The R. B. C. was 1,708,000 and the W. B. C. was 198,660, with ninety-two percent lymphocytes. The patient had been seen by three other doctors with no diagnosis made. Arsenic in large doses was used, but the patient became worse. On March 30, 1923, the R. B. C. was 1,400,000, W. B. C. 260,000 and hemoglobin was twelve percent. The patient was too weak to be moved and died March 31, 1923.

Comment: The family history was very interesting in that it showed a familial tendency to this condition. The insidious onset and the lack of improvement under arsenic therapy should be noted.

Case 2—Male, age sixty-three, seen May 21, 1924. Had pneumonia in severe form three months previous to examination. Malaria one year ago, at which time he was in the University Hospital at Ann Arbor, Michigan, where a W. B. C. was normal, (August, 1923). About six months previous to examination, he developed a mild respiratory infection with slight oedema of the extremities. Malaise lassitude and anorexia gradually developed. One month later he noticed a large gland in the left inguinal region. Since then he had noticed formation of glands in axillary and cervical areas. Six weeks before examination, while in Dallas, Texas, he had a W. B. C. of 22,000.

Physical examination revealed large cervical, axillary and inguinal glands bilaterally. One gland was the size of an orange in the left inguinal region. The liver was slightly enlarged. The spleen extended five inches below the costal margin to the umbilicus and posteriorly to the mid-axillary line. The blood findings showed: R. B. C. 3,784,000, W. B. C. 240,000 and hemoglobin seventy-five percent. The differential count showed eighty-one percent lymphocytes and two percent polymorphs. Under x-ray therapy, the W. B. C. would become markedly lowered for a period of from two to ten weeks before increasing again. Intermittent x-ray exposure was used for nineteen months until a secondary respiratory infection set in which caused his death.

Comment: The patient was fairly comfortable during the nineteen months' treatment. His only complaint was weakness. He was ambulatory throughout and even spent his better days at his

usual business, as a cut-glass salesman. The accompanying table gives the progress of his W. B. C. and x-ray treatment:

May 21, 1924.....	240,000 X	December 29, 1924..	28,400 X
May 24, 1924.....	219,000 X	January 5, 1925....	20,250
May 28, 1924.....	216,800 X	January 26, 1925....	26,600
June 2, 1924.....	204,800	February 17, 1925..	49,700 X
June 6, 1924.....	224,000 X	February 25, 1925..	26,800 X
June 11, 1924.....	160,000 X	March 9, 1925.....	22,000 X
June 17, 1924.....	88,800 X	March 19, 1925.....	12,000 X
June 24, 1924.....	73,200 X	April 15, 1925.....	9,050
July 1, 1924.....	61,100 X	May 16, 1925.....	19,900
July 7, 1924.....	30,500	June 26, 1925.....	26,000
July 22, 1924.....	30,500	July 31, 1925.....	40,000 X
August 16, 1924....	72,800 X	August 18, 1925....	29,700
October 6, 1924....	55,400	November 20, 1925..	95,600 X
December 2, 1924....	125,400 X	December 2, 1925..	55,500 X
December 15, 1924..	83,000 X		

X—Indicates x-ray treatments following the white count. Again the pneumonia preceding the onset is significant. The normal W. B. C. such a short time previous to the onset also shows the possibility of a very quick change from a normal to an abnormal lymphoblastic function.

Case 3: Male, age sixty-four, seen December 26, 1923. He had had typhoid at six years and again at twenty-one years. Had had many boils and carbuncles for thirteen years until three years ago when serum treatment gave him relief. Had influenza one year ago, when he was very sick for three weeks.

In February, 1923, noticed a swelling of the left cervical glands. Later the axillary and inguinal glands appeared. Many were egg-sized. Noticed malaise and weakness. Was in Atlanta, Georgia, at that time where an examination revealed a W. B. C. of 133,000. Took several x-ray treatments with a reduction of the W. B. C. to 80,000, to 50,000 and finally to 15,000, (May, 1923). Felt better and forgot his condition until December, 1923, when the glands were all enlarged. The throat was badly ulcerated, causing extreme pain in swallowing. This condition was present throughout the course of the disease. Except for this condition and generalized weakness, there was no special discomfort. He performed his usual duties with little inconvenience.

Not only the pharynx, but also the mucous membrane of the mouth and nose showed ulceration with a tendency to hemorrhage. The liver was not palpable below the costal margin, but the splenic edge could be located three inches below the costal margin and extending well into the axilla.

The count showed R. B. C. 3,840,000; W. B. C. 31,900, and hemoglobin seventy percent. The differential count was: lymphocytes seventy-eight percent and polymorphs eleven percent. Progress under x-ray therapy:

December 26, 1923....	31,900 X	April 10, 1924.....	13,100
January 8, 1924.....	16,800	April 21, 1924.....	13,650
January 24, 1924....	27,130 X	April 29, 1924.....	17,000 X
February 3, 1924.....	29,400 X	May 5, 1924.....	15,600
February 16, 1924....	18,400	May 26, 1924.....	18,500
March 10, 1924.....	18,400 X	June 9, 1924.....	20,000
March 17, 1924.....	33,700 X	July 1, 1924.....	82,700 X
March 18, 1924.....	31,000 X	July 4, 1924.....	53,800 X
March 20, 1924.....	31,900	July 8, 1924.....	40,400
March 24, 1924.....	26,400	July 17, 1924.....	52,000 X
March 26, 1924.....	30,600 X	July 21, 1924.....	44,600
March 31, 1924.....	26,200 X	August 5, 1924.....	50,000 X
April 7, 1924.....	17,800 X		

Comment: The patient responded to x-ray therapy at first, but soon lost the power to respond. A secondary infection, a periostitis with large cold abscesses on the tibia and humeri caused a disappearance of the various glands, but a respiratory infection set in which caused his death October 4, 1924.

#### CONCLUSIONS

1. Chronic lymphoid leukemia should be considered as a possible diagnosis in every case presenting indefinite symptoms without definite pathology.

2. X-ray seems to offer the best results in treatment of these cases. Benzol therapy has been observed, but is difficult to control without hospitalization of the patient.

3. No treatment so far discovered can prevent the fatal termination of this condition.

4. Three case reports given, follow the typical course and present the typical findings of chronic lymphoid leukemia.

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#### RABIES IN INDIANA\*

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The cry of "mad-dog" has been heard more frequently this year in Indiana than ever before. The marked increase in the number of people bitten by mad dogs this year in Indiana should direct the attention of the medical profession to the subject of "rabies." Statistics obtained from the Pasteur Laboratory of the State Board of Health will illustrate this point.

Year	Brains Examined	Brains Positive	Patients Treated	Deaths Reported Due to Rabies in Untreat. Cases
1917	141	72	67	2
1918	80	43	69	0
1919	89	64	33	1
1920	81	55	29	1
1921	90	44	37	1
1922	107	48	49	1
1923	111	17	24	0
1924	139	42	42	1
1925	208	76	30	0
1926	594	307	364	1

(10 months)

As will be observed from the foregoing figures, rabies is not an academic question but one of practical importance to all physicians. The public is educated to the importance of the Pasteur

\*Data in this paper obtained through the help and co-operation of Drs. William F. King and Norman Beatty of the Indiana State Board of Health.



treatment and to the serious consequences of neglect. It has discarded the use of mad-stones and now seeks recognized scientific treatment.

Every physician practicing in Indiana should feel competent to handle properly the prophylactic treatment for rabies. The treatment is essentially prophylactic for once the disease is under way there is no curative method of therapy. The preventive treatment is simple and requires no special apparatus or equipment and consists of two measures, local and constitutional. Locally bleeding should be encouraged at the time of the bite and thorough cleansing of the wound instituted. Cauterization with fuming nitric acid is the most efficient local remedy. Care and good judgment in treating lesions about the face must be exercised.

The constitutional treatment consists in the use of a series of injections, fourteen in number. The vaccine may be supplied by the drug houses either in two bottles or in individual syringes for each dose. In the first method, bottle number one contains doses one to seven inclusive, and bottle number two doses eight to fourteen inclusive. The technique in this method is the injection the first day of one-half c.c. vaccine from bottle number one; second day one c.c. of vaccine; third day one and one-half c.c. of vaccine and the fourth day and thereafter, two c.c. daily until the first bottle is used and continue the same dosage i.e., two c.c. daily injections until bottle number two is used. In the other method, each syringe is numbered so that mistakes are reduced to the minimum. It is desirable to keep the vaccine on ice. If one of the syringes is broken, as sometimes happens, the physician should carry on with the next one and immediately notify his source of supply so that it may be replaced by another syringe and then given last in the series of injections.

The details of the treatment consist in the daily injection of the vaccine at a prescribed hour. The skin is sterilized and the injection is made in the subcutaneous tissues, a desirable location being in the vicinity of the outer border of the recti-muscles. It is good practice to alternate sides of the abdomen where the injection is made. The local reaction may be some degree of soreness and redness at the site of injection, and usually takes place about the eighth or ninth injection. Constitutional symptoms are slight and may take the form of malaise, neuritis and numbness. These reactions should in no way hinder the treatment. In the large series of cases treated at the local Pasteur laboratory no fatalities are recorded and no serious reactions have been observed.

In his pioneer work in rabies, Pasteur took advantage of the same type of immunity that is conferred by vaccination against smallpox. By experimentation Pasteur obtained a fixed virus of rabies and then attenuated the virus and produced immunity by that attenuated virus. The spinal cords of laboratory animals who have developed rabies from fixed virus are suspended over

caustic potash, at a constant temperature. When the cords have been treated daily for fourteen days there will be material possessing fourteen degrees of virulence. Patients are thus inoculated with 0.5 c.m. of dried rabbit cord in salt solution, beginning with one of low virulence and gradually increasing to one of full virulence. Immunity is thus conferred.

There is usually considerable excitement in a mad dog scare and the animal is often killed. In that case then the head with six inches of the neck attached should be sent to a laboratory for examination. In warm weather the head should be packed in ice. The Negri bodies may not be found in the early stages of the disease. If the dog lives he should be locked up and examined by a veterinarian. A rabid dog will die within two weeks. If the dog lives longer we are not dealing with a rabid animal.

Children are bitten more often than adults because of their habit of playing in the streets. The prophylactic treatment should be given anyone bitten by a known rabid animal or sick animal with suggestive symptoms, or by an unknown animal or by an animal that disappears.

Not every one bitten by a rabid animal will contract rabies. This will depend upon the location of the bite, the severity and depth of the wounds and especially if nerve trunks are involved. Mutilating deep wounds about the face are the most serious and dangerous. Authorities agree that about one person in six will develop rabies if untreated. In doubtful cases, particularly those whose wounds have been about the face, treatment should be instituted at once. If the animal does not prove to be rabid no harm has been done. It is best in those cases to err on the safe side. In wounds of less severity and on the extremities a patient can wait until a report is returned from the laboratory. The mortality in man when rabies has once developed, is one hundred per cent. In treated cases who have received their full course, the mortality is less than one-half of one per cent.

The incubation period in rabies is quite variable, ranging from four weeks to many months, on the average five to eight weeks. The immunity conferred by a course of Pasteur treatment is not for life. It would be good practice to take a course whenever bitten by a rabid animal. Many laboratory workers who handle infected brains take a course every six months to a year.

The statistics quoted in this paper relate to those cases observed by the State Board of Health. The patients are indigent and are referred there as indigent by physician and township trustee. Mad dogs do not bite the indigent alone but attack all classes of society. The physician should feel competent to look after his private patients at home. If the physician evades this duty, the State Board of Health must need assume

the responsibility of looking after the welfare of the people of the state. It behooves the members of the medical profession to look after their own interests and not ask the state to assume some of their responsibility.

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### SPECIAL ARTICLE

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#### NEWS NOTES FROM INDIANA UNIVERSITY

Christmas cheer for the patients of the James Whitcomb Riley Hospital and the Robert W. Long Hospital was given in divided doses this year. In arranging the program of Christmas entertainments this year, Robert E. Neff, administrator of the Indiana University hospitals, arranged the dates for organizations and individuals volunteering to provide entertainment for the patients so that massive dosage was avoided. The hospitals were decorated by the nurses and the occupational therapy department. Trees for the wards were given by the Indianapolis Board of Park Commissioners. The chief Christmas party, with gifts for the children, was managed by the Riley Hospital Cheer Guild, an Indianapolis organization with affiliated clubs here and throughout the state, which has done much to provide for the wants of the Riley children. At the Robert W. Long Hospital, Troop 75 of the Boy Scouts of America, aided by the Junior Auxiliary of the Red Cross, entertained adult patients and distributed presents. Special visiting hours for parents of children in the Riley Hospital were arranged for Christmas day. Gifts for the children were received from all over Indiana, Mr. Neff said. The physicians and nurses were much more pleased to see gifts of playthings and clothing than candy. A Christmas dinner provided for all the hospital patients was carefully planned to suit individual needs. The dietitians had fruit cake on the menu, but personal idiosyncrasies were conscientiously respected.

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Summer courses for practicing physicians are now being worked out by the School of Medicine. Opportunity will be offered for the first time to graduate Indiana physicians in their own state to learn the theory and technic of physical therapeutic methods by clinical and laboratory work under an adequately prepared medical man. Courses in clinical medicine, laboratory methods and surgery will be offered, with an abundance of clinical material available in the two Indiana University hospitals, the Long and Riley, which are a part of the School of Medicine.

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Very complete case records of patients in the University hospitals are made and filed by a cross reference system, so that all laboratory findings, x-ray examinations, history, including social history frequently, treatments, operations, consultants' opinions and results are available on each patient. A summary of the findings and results

is routinely sent to the physician who referred the patient to the hospital, at the time of discharge or furlough. More complete details are available on request of the patient's personal physician at home. Some of the case records exceed fifty pages in length, so that the practice of sending routinely a copy of the complete record in each case has been considered impractical. By the cross reference system, it is possible to readily determine the results of a certain treatment or procedure in a series of similar cases.

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Clinics at the James Whitcomb Riley Hospital for Children are held by members of the medical school staff at the time indicated here: Pediatrics, daily 11:00-12:00; dermatology, Mondays, 8:00-9:00; neuropsychiatry, Tuesday, Thursday, Saturday, 9:00-10:00; ophthalmology, Wednesdays, 8:00-9:00. Surgery clinics are held as follows: Head and neck, Monday, Wednesday, 8:00-10:00; orthopedic, Monday, Wednesday, Saturday, 10:00-12:00; general, Tuesday, Friday, 8:00-10:00; ear, nose and throat, Tuesday, Friday, 10:00-12:00; dental, Thursday, 8:00-9:00; bronchoscopy, Thursday, 9:00-10:00; genito-urinary, Thursday, 10:00-12:00; eye, Saturday, 8:00-10:00. All afternoon surgery is open to students. The pediatrics out-patient clinic is held Tuesday and Friday, 1:00-3:00. The orthopedic out-patient clinic is Wednesday and Saturday, beginning at 10:30. Corrective gymnastic clinic is conducted Tuesday and Friday, 9:00-12:00, and physiotherapy daily, 9:00-12:00. Occupational therapy is carried on daily, both morning and afternoon. Prof. H. H. Young, Ph.D., of Indiana University, conducts a clinic in psychology on Fridays, and a neurological clinic is conducted by a member of the medical staff, also on Fridays. A new infant feeding clinic has just been started on Tuesdays and Thursdays at 10:30 a. m. Physicians are cordially invited to visit any of these clinics.

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A number of physicians who are not members of the staff availed themselves of the opportunity as guests of the School of Medicine to attend the regular monthly seminar December 17, when interesting medical and surgical cases from the Indiana University hospitals were presented and discussed by members of the resident and teaching staff, and results of research announced. Light refreshments were served at a "mixer" which followed the program. The next seminar will be held January 21, at 8:00 p. m., and all physicians will be welcomed.

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Graduation exercises for fifteen pupils of the Indianapolis public schools, who had attained normal weight and strength after a period in the nutrition classes under the direction of Dr. James H. Stygall, director of school nutrition for the Indianapolis Board of Health, were held at the Hotel Lincoln on December 29, under the auspices



of the Indianapolis Lions Club. Dr. Stygall is assistant in medicine in the Indiana University School of Medicine.

City officials and educators praised the work of the Theodore Potter Fresh Air School here in promoting better health and scholarship and told of the pride that citizens were taking in the records made by children there, during a pre-Christmas program. The Potter Fresh Air School was fostered by the Marion County Tuberculosis Association, of which Dr. Alfred Henry, assistant professor of clinical medicine in the I. U. School of Medicine, is president. It is now wholly supported by the city of Indianapolis.

A bill to create a psychiatric hospital in connection with other Indiana University hospitals here, as recommended in the annual report of the Board of State Charities, was discussed at the eleventh annual session of the Indiana Society for Mental Hygiene in Indianapolis, December 13. A resolution declaring that the Indiana legislature should meet the needs of the state institutions in the field of mental hygiene was adopted.

About fourteen different medical journals have been published at various times in Indiana, according to the records of Mr. Alan Hendricks, librarian of the Indiana School of Medicine. Mr. Hendricks is endeavoring to make a complete file of these interesting publications and has asked for the co-operation of physicians in the state in locating missing copies. The record Mr. Hendricks has of Indiana medical journals has been compiled from various sources, and he would like also to know if the list he has is complete and correct. The list is as follows:

Illinois and Indiana Medical and Surgical Journal, 1846-48, (Chicago and Indianapolis).

Indiana Journal of Medicine, Vol. I-VI, 1870-75, (Indianapolis). United with Cincinnati Lancet and Observer, September, 1875.

Indiana Medical Journal. Quarterly. Vol. I, No. 1, 1854, (Evansville. Running title of first signature: Evansville Medical Journal).

Indiana Journal of Medicine and Surgery, 1855. Apparently only a portion of Vol. I was published, (Madison).

Indiana Medical Journal, Vol. I, May, 1881, to April, 1882, (Indianapolis).

Indiana Medical Journal. Semi-monthly, (Indianapolis). Vol. I, No. I, September 5, 1882, became a monthly with No. 11, March 25, 1883, and continued as monthly to end of 1908, when it was combined with the Central States Medical Monitor, (Indianapolis), to form the Indianapolis Medical Journal.

Indiana Medical Reporter, monthly. (Evansville, 1880, Chicago, 1881), Vol. I-II, January, 1880, to June, 1881. Continued as the Western Medical Reporter, Chicago.

Indiana Eclectic Medical Journal, (Indianapolis), Vol. II-VII, 1884, to February, 1889. Continuation of Eclectic Medical Journal, Indianapolis. Continued as:

Medical Free Press, (Indianapolis), monthly. Vol. VIII-XII, 1890-94.

Medical and Surgical Monitor, (Indianapolis), Vol. I-VIII, 1898-1905. Combined with Central States Medical Magazine, forming Central States Medical Monitor.

Central States Medical Magazine, (Anderson), Vol. II, 1904, Nos. 1-10, Vol. III, 1905. Combined with Medical and Surgical Monitor, in 1905.

Central States Medical Monitor, (Indianapolis), Vol. VIII-XI, 1905-08. Combined in February, 1909, with the Indiana Medical Journal to form the Indianapolis Medical Journal.

Indianapolis Medical Journal (Indianapolis), Vol. XII, 1909 to present time.

Indiana Medical Journal, (Indianapolis), Vol. I-XXVII, 1882-1908. Combined in 1909 to form Indianapolis Medical Journal, with Central States Medical Monitor.

Fort Wayne Medical Magazine, (Fort Wayne), monthly, 1892-1908.

Journal of Indiana State Medical Association. (Fort Wayne), monthly, 1908 to present time.

C. R. MACDONNELL.

#### KAHN TEST

J. E. Houghton, Oscar B. Hunter and Thomas M. Cajigas, Washington, D. C. (*Journal A. M. A.*, December 4, 1926), regard the Kahn test as being a superior method for the serum diagnosis of syphilis. Unlike the procedure of the Wassermann test, which consists of arbitrary steps, the procedure of the Kahn test is based on a scientific foundation and is free from such steps. The Kahn test is comparatively simple, direct and rapid, enabling clinicians to obtain Kahn reports from laboratories within several hours after submitting blood specimens, and in emergencies in less than an hour. The Kahn test may be carried out everywhere in the world with the same degree of accuracy, thus rendering avail-

able a serum test for syphilis in the tropics and in other parts of the world where the Wassermann test, as a result of its complexity and use of animals, is either not available or available in a very limited degree. The Kahn test consists of three serum procedures and two spinal fluid procedures capable of giving clinicians far more information in connection with the diagnosis and treatment of syphilis than the Wassermann test. The Kahn test is more sensitive than the Wassermann test in treated cases and in the primary stage of syphilis. The test is also somewhat more sensitive than the Wassermann test in other stages of syphilis. The Kahn test has removed the serum diagnosis of syphilis from empiricism and placed it in the realm of quantitative science.

## THE JOURNAL of the

### Indiana State Medical Association

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.  
Editor and Manager

Office of Publication, 406 W. Berry St., Fort Wayne, Ind.

JANUARY, 1927

## EDITORIALS

### INCOMPLETE EXAMINATION IN INJURY CASES

A malpractice suit against one of our members brings out a point that deserves emphasis, and it is that in case of injury the attending surgeon should leave nothing undone to determine the extent of the injury, even going so far as making an exhaustive examination of every portion of the body. In the case in question a woman had an automobile injury and was thought to have nothing more than a bruised arm in consequence. An x-ray picture of the arm taken immediately after the injury showed no broken bones. The complaint states that a fracture of the surgical neck of the humerus, discovered several weeks after the injury, necessitated an operation on the shoulder to replace the bone and reduce the fracture, and that the head of the humerus had to be removed entirely. The complaint further states that the patient was in the hospital for nine weeks, and has been completely crippled through the loss of the use of the hand and arm. Damages in the amount of ten thousand dollars are sought as a direct result of what has been termed the neglect on the part of the first surgeon to discover the extent of the injuries.

We cannot emphasize too strongly the point that is represented in this complaint, whether the charge that has been made is true or not. Every case of injury deserves something more than a superficial examination, for the purpose of determining the possibility of broken bones or other injuries that might possibly escape discovery except under very painstaking examination, including inspection and careful interpretation of comprehensive roentgenograms. Not only should the surgeon make a very careful examination for the purpose of protecting himself, but also to protect the patient, to say nothing of having the correct data in case the matter gets into court.

### STATE MEDICINE

There was a time when the big men in the profession, safely settled in comfortable berths, laughed at the prophecy that state medicine is a possibility in this country. Even the great *Journal of the A. M. A.* mirrored the thoughts of the leaders of our profession, and there were many trailers who were inclined to laugh at the editors of the state journals who, seeing the handwriting on the wall, thought it time to warn their readers

to be up and doing to prevent some of the bad features concerning governmental medicine which certain enthusiasts are trying to cram down our throats. Well, times have changed, and now the *Journal of the A. M. A.* not only recognizes the possible oncoming of state medicine but attempts to offer some remedy for its worst features by suggesting constructive programs covering this phase of advancing thought and action. Thus, in its issue of October 30, 1926, *The Journal of the A. M. A.* says, "In the midst of the present social upheaval one may well wonder the position physicians eventually will occupy in the cosmic scheme. Intelligent observers have informed us that the answer depends entirely upon our own conduct, the mass conduct inherent in intelligent organization. \* \* \* State medicine, government medicine, socialized medicine, has operated through scores of channels, may continue to expand until the majority of physicians and the majority of people will become elements in some vast government machine; but even so, private individual arrangements for personal and family health service are likely to continue indefinitely to demand skillful physicians for the most intelligent members of society. \* \* \* The intrusions and interferences are not of physicians' choosing but are being forced increasingly on physicians in their class by the unwarranted attempt at expansion of government in the phases of personal health which violate every tradition of our people and are repugnant to those who serve and those served by a great profession. Society, acting through representative government, has responsibilities in medical or public health matters, or in other fields, but the line of demarcation between what is public and what is personal in matters of health must not be pushed back by government bureaus until government has invaded the privacy of the home and stands at the bedside of the individual."

It will be noted that the *Journal of the A. M. A.* admits the possibility of the acceptance of state medicine by the people, and the soothing salve for our wounded feelings comes from the announcement that there always will be a field for the better trained physicians among those who can afford to pay for services by a private medical adviser. The rank and file of the people are to be herded like cattle and given their medical and surgical attention by government employees, and the rank and file of the medical profession are to be mere cogs in a great machine that renders impersonal and perhaps poor service to the people. In this connection it may be well to remember that we have some members of our ranks that are in favor of state medicine. Thus we find, in the October 20th issue of *The Nation*, an article by Dr. Joseph Krinsky, entitled the "Socialization of Medicine," in which the writer openly and boldly advocates "the socialization of medical institutions, which means ultimately and inevitably the socialization



of medicine. The dedication of the medical profession to public service as an agency of the community, the members of the profession serving as public officials into whose care is entrusted not alone the care of the sick but the far vaster function of teaching health, preventing disease, and guiding the community from childhood to advanced old age in the path of right and healthy living."

Dr. Krinsky very plainly intimates that the fault lies with the medical profession when it comes to the abuse of charity, for patients follow the human instinct of getting something for nothing, and the doctors fall over one another in the scramble for hospital and dispensary appointments. His remedy therefor consists in placing the hospitals and dispensaries out of the authority of charity but on the same basis as public schools, high schools, and state-controlled universities.

Leaving out of consideration the question of the sinister influence of politics, the loss of independence on the part of members of the medical profession, and the precarious position occupied by any physician who depends upon a public office for his income, no matter how competent he may be, there still remains the questions of paternalism which even the best thinkers believe to be fraught with great peril to the public.

State medicine is just as much a certainty as that the sun will rise tomorrow. All this may be due in a large measure to the recognition on the part of the public that institutional service furnishes advantages not to be obtained through the medium of the private practitioner of medicine, yet in the main it is due to the human instinct of getting something for nothing or next to nothing, and the spineless attitude of the majority of the medical men of the profession who are willing to permit the rankest kind of abuses of medical services in the name of charity or because it offers preferment of one kind or another to the giver of the service. If, as it is asserted, a very large percentage of the members of the medical profession are working for a mere pittance, or far less than the ordinary laboring man receives, whose fault is it that the medical profession is not demanding and securing adequate compensation for services rendered, just as occurs in any other vocation? Does the plumber, bricklayer or stonemason, who receives from twelve to eighteen dollars per day, for seven or at the most eight hours of indifferent service, donate any of his time, discount any of his bills for service, or even wait for his pay? Perhaps it may be argued that the average physician will be better content and be better paid when he occupies a government position, but our contention is that he not only loses the incentive for work, and the public will get poor service, but in the final analysis the job is hopelessly dependent upon vagaries of politics, competition of an unfair kind in the scramble for office, and a variety of things which place the student in a posi-

tion whereby he will think twice before he enters the profession.

However, there is no use in arguing about the pernicious effects of socialistic medicine. The thing to do now is to say how we are going to stem the tide of popular demand and save anything from the wreck. The solution of all of the perplexing questions pertaining to this matter will depend upon an organized medical profession. How much can be expected in this direction is purely speculative, for, to be perfectly frank, we haven't very much confidence in the assertion that medical men will stick together in an effort to prevent some of the ills that threaten. The whole trouble seems to be that the vast majority of medical men are self-centered and naturally selfish. Each and every one of them is quite anxious to secure advantage for himself, but he manifests little interest in the advantages that may accrue to his fellow practitioner or confrere. Were this not so, it never would have developed the glaring abuses of medical charity that are present in every community in this broad land.

#### APATHY OF PHYSICIANS CONCERNING DISEASE PREVENTION

The commissioner of health for the State of New York has had some very pertinent things to say concerning the duty of medical men toward disease prevention and active co-operation in health campaigns. Recently he has given out a scathing rebuke to the medical profession concerning its apathy in connection with the anti-diphtheria campaign being carried on in the State of New York. After pointing out the possibilities of securing a very marked fall in the morbidity and mortality rates from diphtheria as a direct result of immunization by toxin-antitoxin, and the results that have been accomplished through the efforts of public health workers, he points out that the general medical profession of New York State has taken very little interest in the work. His definite statement concerning this is as follows: "From official reports received by state and local health officers and from information obtained through innumerable personal interviews with practicing physicians, I am prepared to state, without fear of contradiction, that up to the present time the great majority of the members of the medical profession have done little or nothing to bring about immunization against diphtheria among their private patients."

A criticism that will apply to New York will apply to Indiana, and though we have had no active campaign on diphtheria immunization in this state, the medical men of Indiana long have been familiar with what toxin-antitoxin will do toward wiping out diphtheria and yet we do not believe that there has been any appreciable effort on the part of the medical men of Indiana to carry this preventive measure into effect.

Now that our own State Board of Health has undertaken a campaign to eradicate diphtheria

from Indiana we feel disposed to quote further what the commissioner of health of New York has to say concerning the matter, and it is as follows:

"It is hardly conceivable that the general immunization of children of pre-school age can be achieved, to any great degree, unless general practitioners make themselves responsible for immunization among their own patients, or such of them as are willing to have it done. I have tried faithfully to determine why the general practitioner has seemed to show indifference or hesitancy to take an active part in health campaigns and utilize, as a matter of routine, established preventive procedures. Many reasons have been given, but the commonest, and I fear the most difficult to overcome, is the hesitancy and delicacy on the part of our best practitioners to take any action among their patients which would seem to leave them open to the charge of commercialism by seeking to increase their practice. There is further a question of so-called medical ethics which apparently deters many physicians from sending for their patients, notwithstanding the fact that they should

be seen and advised as to conditions which require medical attention. This attitude of mind is not to be sneered at nor lightly cast aside; but I submit that it must be abandoned from sheer necessity if the medical profession is to do its full share in the work of preventive medicine, and I firmly believe that the general practitioner is not doing his full duty to his clientele if he does not keep constantly in touch with their physical condition, growth, development and protection against infection. This cannot be done unless physicians in general will follow the example of a few of their number who regularly adopt the practice of sending for their patients at such intervals as they deem necessary for physical examination, regulation of the diet, habits of living, vaccination against smallpox, typhoid fever, when deemed necessary, and immunization against diphtheria; and I venture to predict that by so doing, physicians who have the confidence of their patients will find that confidence increased and their reputation for ethical practice untarnished. The gratitude of those who will appreciate the interest shown in their condition, and the results which are certain to be evident in many cases, will more than outbalance the opinion of the few petty-

minded individuals who will see nothing but ulterior motives and selfishness."

#### MEDICAL POLITICS

A speaker at the medical editors' meeting in Chicago said that it has been charged that some medical societies are run by a "machine" that is well-oiled and in consequence everything goes off smoothly and without a hitch. This was in reference to the fact that so many of the members of the House of Delegates and those who have the

right to vote are re-elected from year to year. He defended this policy by saying that it is quite possible to have a machine with too much oil as well as to have one with no oil at all, and it is his opinion that the men who are active and have the best interest of the medical profession at heart are the ones who not only should be elected to represent their confreres in those bodies that settle the destinies of the Association, but that when they have served well they should be continued in office.

Certainly the welfare of the Association can be trusted to those who at all times have been found constructive in their ideas, and always acting in the

interests of the high ideals and traditions of the medical profession. If there is any one thing that will produce chaos in medical conventions it is the new member who with a rather exalted idea of his own importance and his own conception of problems, gets up before the convention and offers all sorts of queer motions and ill-advised resolutions, and makes all sorts of fiery speeches that not only are inappropriate but act a good deal like the proverbial monkey wrench in the cog wheels of efficient machinery. The truth of it is that no medical society, and in fact no organization, runs satisfactorily and accomplishes the most without having some sort of a "machine" to control its destinies. The whole question resolves itself into a consideration of what constitutes an efficient and good "machine," and that is determined by the personnel and character of the men that we put into offices. A man is known not only by the company he keeps but by his own conduct, and if his conduct in his community always is above reproach, and he is a man of sound constructive ideas, he can be trusted in positions of honor and importance. To put an erratic and unreliable man forward to represent his constit-

## To Our Members!

The Indiana Legislature is in session. The influence of every member of our Association should be brought to bear upon the senators and representatives in efforts to secure a medical law that will protect the public from the uneducated, poorly trained, and otherwise incompetent person who attempts to treat the sick. You will be asked to assist, so be ready and waiting to respond when the call is made. A united medical profession can accomplish the desired end.

### THE LEGISLATIVE COMMITTEE



uents is a serious thing, and oftentimes, on the spur of the moment, this is done.

### LAY INQUIRY CONCERNING STATE MEDICINE

The possibilities of having state medicine in this country have been discussed time and again in the columns of *THE JOURNAL*. Our contention has been that the medical profession itself is to blame for the growth of the idea that the ills and infirmities of the human race can be cared for to the best advantage at federal, state or municipal expense.

Some of the leaders in the profession have maintained stoutly that socialistic tendencies in medicine never would meet with general favor, and that the public would not stand for any such fallacious idea. However, our prediction that state medicine would be a reality unless the medical men awakened to the fact that the idea is growing in the minds of the public, is every day becoming more manifest. This growth of an idea that is pregnant with possibilities of harm can be traced to the general attitude of the medical profession in encouraging all sorts of utopian but impractical ideas concerning benevolence and charity as applied to the treatment of human ills. Medical charity is commendable, but it has its place in the proper order of things and cannot be abused without evil consequences. No consistent argument can sustain the theory that we should have paternalism in medicine any more than we have paternalism in anything else. In fact, if we desire to destroy ambition and initiative, to say nothing of making a large percentage of our people dependent, and disturbers of the peace and quiet of our communities, all that is necessary is to further this paternalistic scheme which meets with much favor with some individuals. We are rather surprised to note that certain medical men are advocating very boldly that state medicine should be adopted, and this is evidenced by an article in a lay publication, *The Nation*, October 20, 1926, in which state medicine is recommended, with free medical and surgical services to all who may desire such attention at federal, state, or municipal expense. As a pacifier for the medical profession the writer says that there always will be a certain number of well-to-do people who seek professional services from the private practitioners of medicine. Now comes a letter from a representative of a woman's organization who writes *THE JOURNAL* as follows:

Fort Wayne, Indiana,  
December 2, 1926.

TO THE EDITOR:

The Pre-School Council of Mother's Study Circles wishes to ascertain the views and opinions of your medical association concerning a free clinic for all people and all persons of all ages.

Yours truly,

MRS. E. L. SLAGLE, Secretary.

This letter indicated to us that some of the women have been discussing the subject of state medicine and perhaps are reading some of the

views that have been expressed in current lay publications concerning this debatable question. On the other hand, we may conclude that some of these so-called advanced ideas may come from suggestions arising through the operation of benevolent and charitable work on the part of willing physicians who are answering the calls of school and Red Cross nurses, and representatives of various uplift societies, to render free medical and surgical services to not only the deserving poor but some others who are not entitled to such services. At all events our answer to the letter is as follows:

December 8, 1926.

Mrs. E. L. Slagle, Secretary,  
948 East Wayne Street,  
Fort Wayne, Indiana.

Dear Mrs. Slagle:

Your letter of December second, in which you ask, on behalf of the Mothers' Study Circles, what the medical profession thinks of the plan of establishing a free clinic for all persons of all ages, has been received.

We think that we voice the sentiments of the regular medical profession by saying that no objection will be raised to the establishment of free clinics of any kind for the indigent and deserving poor, but if, as your inquiry indicates, you desire to know what the medical profession thinks about the establishment of free clinics for all persons of any age, and of whatsoever financial condition, we are sure that the profession feels about it just as you would concerning the free distribution of food, clothes, automobiles, radios or anything else that is needed or used by the inhabitants.

The tendency on the part of many societies and institutions is to encourage pauperism and dependency through misplaced benevolence and charity. In this way we are increasing the number of dependents, and adding to the number of those who are expecting something for nothing. In consequence our taxes are increasing all the time for the support of many people who are amply able and should support themselves in their every need.

Every reputable member of the medical profession gives freely of his time and services, and oftentimes of his money, in relieving the sick poor. We know of no followers of any vocation who can match the members of the medical profession in donation of services to the worthy poor and all too frequently to many who receive the services gratuitously through misrepresentation. As a matter of consistency and right, even the members of the medical profession should not be asked to donate their services for the relief of the sick any more than the groceryman is asked to donate groceries to sustain the lives of the poor, or John D. Rockefeller is asked to supply the gasoline to run the limousines of the poor (?) and overworked (?) plumber. However, as before stated, the members of the medical profession *do* donate their services to the worthy poor and do it cheerfully, but there is no good reason why medical and surgical services should be donated to *all* persons irrespective of financial status, even though the physicians rendering such services are paid out of public funds, for, as already indicated, such a policy tends to increase pauperism and dependency, lessens self-respect, destroys initiative and productive power of the people, and, as a perfectly natural result, ends in increased taxation.

Sincerely yours,

THE JOURNAL OF THE INDIANA  
STATE MEDICAL ASSOCIATION,  
By ALBERT E. BULSON, JR.,  
Editor and Manager.

If there is any one individual who is remiss in his duty to himself, his profession, and the public, it is the average doctor. The only way that the ordinary doctor can be stirred into activity in connection with economic and social problems is to hit him with a club. Arguments seem to be of no avail, but when he is hurt he arouses to action and really accomplishes something. Unfortunately, this spread of socialistic tendencies will hurt him, and when he retaliates it will be too late. Aside from the harm that is done to the medical man, and the profession he represents, a far greater harm will be done to the public. It is not only a case of self-preservation, but it is a fight for the best interests of humanity that justifies the medical profession, individually and collectively, in looking upon paternalistic and socialistic ideas pertaining to medicine with disfavor.

#### PROPAGANDISTS BEFORE WOMEN'S CLUBS

The Sheppard-Towner Act propagandists have an eye to business, and they know how to pull the wires. Pending congressional action upon the renewal of the old Sheppard-Towner Act, efforts have been put forth to secure the co-operation of the women, who are asked to bring pressure to bear upon their senators in congress. This has been accomplished adroitly through the medium of child welfare meetings that have been held under the auspices of the various parent-teachers' and other women's clubs. It does not require a stretch of the imagination to understand that these women's clubs do not get very much information that would poison their minds against the Sheppard-Towner Act. Really, we take off our hats to these propagandists who work politics in such a smooth way. As usual, the medical profession is "asleep at the switch," and in consequence the thinking women belonging to clubs know little about the attitude of the American Medical Association which has gone on record as opposed to the Sheppard-Towner Act. In all probability if the women are told that there is opposition from the medical profession, they also are told that the opposition is due to prejudice. They do not seem to understand that medical men are not opposed to child welfare, nor are they opposed to the objects to be obtained by the Sheppard-Towner Act. In reality, it is the manner in which the sponsors of the act have gone at the work.

The Sheppard-Towner Act has established a bad precedence, and it paves the way for further subsidies, at the expense of the taxpayers, which are unevenly and unwisely distributed. The women ought to have the facts in connection with this whole matter, but up to the present time we believe that about the only education they have received has come from the propagandists who not only have favored the Sheppard-Towner Act but many other things that go with it and which might be classed as entirely detrimental to public policy. The thing to be remembered is that women have

votes, and their influence is to be reckoned with. Furthermore, women are far more impressionable than men, and less inclined to be analytical, so it becomes all the more necessary to be specific in presenting arguments to them. The Sheppard-Towner Act appeals to the sentiments. Sympathy at once goes out, without taking into consideration all of the facts in connection with the operation of that bill. No one in his right mind will argue that child welfare should be neglected, but the subject must be handled in a rational way, and in a way that will not prove to be a boomerang.

#### MEDICAL FRAUDS ADVERTISED IN LAY PRESS

Two of the leading newspapers of Northern Indiana recently have been publishing full page advertisements of medical frauds that have been denounced by some of the prominent national lay publications, to say nothing of having been exposed by the Bureau of Investigation of the American Medical Association. The publishers of these newspapers know that they are furthering a fraud, notwithstanding the fact that they make lame excuses for having accepted the advertising in question.

We wonder what the Better Business Bureaus of our cities are thinking of when they overlook the fact that newspapers, by carrying the advertising of medical frauds, are promoting imposition and loss upon that element in the public, the poor and the ignorant, that is most deserving of protection. If a merchant deviates to the slightest extent from strictly honest advertising, better business bureaus jump on that merchant at once and make him change his advertising, but seldom is anything said to newspapers concerning the publication of the advertising of medical frauds. If a member of the medical profession says anything to these guilty newspapers concerning the advertising of medical frauds he at once is accused of complaining because his own business is injured, or that he has some personal axe to grind. Probably there isn't a single instance in which the advertising of medical frauds has hurt any reputable professional man, so we cannot be accused of selfish reasons for complaining about such advertising. The truth of the matter is that any newspaper that takes advertising of medical quacks, and medical frauds of various kinds, is doing it because of the profit obtainable. In other words it is a question of money, and the publishers are willing to stretch their consciences in order to make a showing on the right side of the ledger. There is no other logical explanation.

One of the best and surest ways to bring about a change of heart on the part of the publishers of newspapers is to approach them through better business bureaus, and especially through merchants who are harmed as much by the advertising of medical frauds as they are harmed by the advertising of fake merchandise of any kind. When



the big merchants conclude that advertising a medical fraud is just as dangerous and injurious as advertising a merchandise fraud, and they make their opinions felt with the publishers of newspapers, then and then only will newspapers cease to carry the advertising of the medical faker. An appeal to reason and conscience does not seem to have any effect, but an appeal to the dollars and cents side of the ledger always brings about results.

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### EDITORIAL NOTES

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#### DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

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ARE you one of the fellows who is neglecting to urge periodic health examinations for the apparently healthy among your patrons? And if so, why?

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EVERY county medical society is the judge of the qualifications of its members, but rejection of a candidate by one society should be considered a bar to acceptance by any other society.

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THANK the Lord, the Board of Trustees of the A. M. A. is recommending that lectures on medical ethics shall constitute a portion of the curriculum in every medical school approved by the Council on Medical Education.

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DR. WILLIAM H. FOREMAN, of Indianapolis, has asked us to announce that he has no connection of any kind whatsoever with the so-called Custer Rectal Hospital, despite any announcement that is being sent out by that institution crediting him as a consultant.

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INDIANA's present medical law would be fairly satisfactory if it could be enforced. Let us make a strenuous effort to put teeth into the law so that it can be enforced. Unless we can do this, we might as well have no medical law at all.

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YE gods, it is time to make up another income tax report. There are few doctors who will complain about the tax, but it is an awful bother to make up the report. The Lord pity the doctor who keeps no books, or whose records are in a chaotic condition.

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WE might just as well recognize the fact that

unless the medical profession, individually and collectively, gets back of the movement to banish diphtheria, the state will take over the matter entirely. Our apathy will furnish another cog in the fast growing theory that state medicine is a good thing for the people.

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THE Macfadden publications made a great bid for an increase of circulation by offering Christmas premiums. Most of these publications have been condemned, and justly so. Members of the medical profession in particular should use their influence to curtail their sale, and for reasons that have been clearly set forth in the publications of the American Medical Association.

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THE medical profession never will accomplish anything worth while until it puts up a more united front, and until it takes more interest in everything pertaining to not only medical organization but civic and political activities as well. Whenever this occurs, the politicians and the people are going to take notice and the influence and opinions of medical men will be given greater respect.

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LOOK out for the detail man who lies like a turnip thief concerning the approval by the Council on Pharmacy and Chemistry of the American Medical Association of preparations that he is representing. Don't consider and don't accept samples of preparations that have not been approved. It is the only way that we can force universal honesty among manufacturers of pharmaceutical preparations.

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WE are fortunate indeed in having an executive secretary who formerly was a newspaper man and who knows how to prepare information for the daily press. In a measure this will safeguard the interests of the medical profession, for it is a well known fact that hertofore the newspaper reporters have distorted and misrepresented actions and opinions which have had their birth in the annual sessions of our Association.

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ON January 1, Dr. Frank W. Cregor, of Indianapolis, assumed the office of president of the Indiana State Medical Association. Dr. Charles N. Combs, of Terre Haute, retiring president, deserves credit for a year's excellent service, during which time he visited practically every section of Indiana and stimulated interest in organization work. Dr. Cregor gives promise of emulating the example set by his predecessor.

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IF any one thinks that the Council is not a serious body of working men, he should have attended the last midwinter meeting held in Indianapolis in December. Throughout an entire day, including even the luncheon hour, councilors discussed a variety of topics that pertain to the progress and advancement of the Association. The discussions

were analytical and helpful in solving some of the problems that make for a better medical society.

HAVE any of you older doctors ever tried to prove that you were born, and when, where and under what circumstances? If not, you don't know what is before you if you ever try to leave the United States to go to a foreign country that requires a passport. It is a unique experience to furnish all of the evidence that Uncle Sam sometimes requires, and it becomes a little vexatious when family records are forgotten, lost or destroyed.

WILLIAM L. SAUNDERS, director of the Federal Reserve Bank of New York, has offered a prize of \$100,000 for the discovery of the prevention and cure of cancer. We would like to bet a dollar against a punched nickel that no one will hear a squawk from Koch, of Detroit. To tell the truth, in all probability Koch already has his \$100,000 and then some as a direct consequence of his discovery of sufficient suckers to bite at his alluring bait.

LAST year there were 360 deaths from diphtheria in Indiana, and while that number is less than the number of deaths occurring during the preceding year, yet it is far too large when we consider that diphtheria is a preventable as well as a curable disease. A large portion of the 360 deaths represent cases that were not recognized sufficiently early or did not have appropriate preventive or curative treatment. The importance of administering toxin-antitoxin as a preventive, and antitoxin as a curative remedy, cannot be too forcefully emphasized.

AN editor usually is damned with faint praise, and the medical editor meets no better fate than any other. However, a little keen observation of the manner in which the editorial office of *The Journal of the A. M. A.* is run leads us to say that we think that the present editor of the largest and the best medical journal in the world is deserving of the exalted position that he occupies. He is a man of ability, keen observation, quick wit, and constructive executive force. The Board of Trustees has acted wisely in retaining him, and imposing in him the confidence they have through great latitude in the exercise of his official duties.

THERE are mild epidemics of smallpox in various sections of Indiana. The disease seems to be a great graft for the chiropractors and osteopaths who generally recommend massage in some form as a preventive as well as a cure for the disease. One osteopath in the southern part of the state is using a cantharides plaster as a preventive of smallpox. We hate to wish any one any ill luck, but we really think that a good lesson would be learned if some of the people who are taking the advice of osteopaths and chiropractors concerning the

prevention and cure of smallpox, diphtheria and other communicable diseases, would contract smallpox.

IT is said that the A. M. A. is about to issue a pamphlet concerning the education of medical men to speak before lay audiences and we shall welcome the appearance of such a pamphlet. The average doctor does not know how to speak before any audience, and is a failure when talking to a lay audience concerning any phase of medicine. If he can be taught to boil down his ideas so that he can express them in concise and understandable language, much will be accomplished in the interests of public health education, and the time has come when every medical man must do his part in educating the public concerning how to keep well.

SEVERAL very prominent and highly respected medical men of the state are asking for the repeal of that portion of the "Wright Bone Dry Law" which prevents members of the medical profession from prescribing alcoholic beverages for sickness. Reverend Shoemaker, the ministerial head of the Anti-Saloon League of the state, with a very careless regard for truth, calls these men "drinking doctors." Reverend Shoemaker does not do the cause of prohibition or religion any credit when guilty of falsehood and deception in connection with his vocation, but we have noted that most of the uplifters and reformers are not satisfied to fight for a principle on its merit, but resort to all sorts of jugglery of morals in bolstering up their cause.

THE undiluted nerve of a chiropractor is evidenced by some advertising in a daily paper which we have just received and which reads as follows: "Tuberculosis and most all physical ailments are caused by a misaligned segment of the spine, producing nerve pressure. Chiropractic adjustments remove the cause and health is the result." The worst feature connected with this enterprise is that a certain number of poor as well as ignorant people will "fall" for this sort of imposition and be swindled, to say nothing of delaying the receipt of trustworthy advice and treatment. There should be an effective way of putting a stop to this sort of falsehood and deception of the sick.

THERE may be some doctors who neglect or hesitate to use antitoxin for fear they will have to pay for the antitoxin in case it is used in a poor or indigent family. To such we desire to call attention to the 1905 Indiana law concerning this matter, which says that any registered physician can get antitoxin at once, from any druggist carrying antitoxin, if he will certify that the patient upon whom the antitoxin is to be used is indigent or deserving of charity at the hands of the state. The antitoxin will be paid for by the state in such cases. Thus it will be seen that there is absolutely no excuse for not administering



antitoxin in any case of diphtheria, and in the quantity indicated.

WE hope that the chairman of every committee of the Indiana State Medical Association will feel that he owes it to the Association as well as himself to get busy upon the work that has been assigned to him. There is absolutely no sense in having "paper committees," or, in other words, committees that do absolutely nothing until the eleventh hour and then send in a perfunctory report which means nothing. If any chairman of a committee feels that he cannot do the work that has been assigned him then he ought to write to the president and resign so that somebody can be put in his place who will function. Furthermore, if committees are not to do any work except turn in a report, then let's do away with those committees altogether.

THIS is the time of year when agents of every kind are wandering around like fleas in the summer time looking for a victim. They have something to sell, and usually are asking for a payment down on account. Unless you know the agents personally, and that they are trustworthy, you are a blooming idiot if you pay anything down, no matter how specious the plea may be for you to take advantage of discounts or opportunity to obtain quality by the cash outlay. The agent knows about or can find out about your responsibility, but seldom do you have an opportunity of investigating his credit. Therefore, pay for the goods when you get them and after you have determined that they are as represented, but do not pay for them before.

THE diphtheria prevention campaign in Indiana is on, and the Bureau of Publicity of our Association has succeeded in calling attention to the matter in a very sensible and specific way through an article distributed to the lay press for publication. We are glad that this matter has been brought to the attention of the people of Indiana through the lay press, as it needs more co-operation than otherwise would be secured. We particularly urge the members of the medical profession to get the women's organizations back of this movement. There was a time when the influence of women did not count for much, but now that they have the vote they certainly are cutting some figure, and no one dares to go against an organized effort of the women's clubs.

WE smile when some delinquent doctor pays his state medical association dues along about October or November and immediately thereafter puts up a howl because he hasn't been getting his JOURNAL and by inference tries to make out that his name has been omitted from the mailing list without just reason. Of course, if it is possible, we send him all the back numbers that he desires and are very glad to reinstate his name on our

mailing list, but why the complaint when it has no better foundation than the doctor's own carelessness and indifference. The post office regulations require that we erase delinquent names from our mailing list. A whole lot of trouble, time, and even expense would be saved if doctors would pay their medical society dues on time.

IN the death of Dr. J. G. Adami, which occurred in Liverpool on August 29th, the world has lost perhaps the greatest pathologist of this generation. Adami's main claim to fame rests in his writing and teaching, even though he made for himself an enviable reputation as an original research worker. His great textbook, "Principles of Pathology" will live as the most successful attempt to develop pathology as a science. With John McCrae he wrote another textbook of pathology in one volume which was accepted as authoritative. He was very popular in this country, as also in Canada where he lived for so many years and where much of his teaching was done at the McGill and other Canadian universities. His reputation as a pathologist was international.

THERE are some Better Business Bureaus that deserve a great deal of credit for fighting medical frauds. One bureau that we know about is carrying display advertising in the daily papers in which it is pointed out that millions of dollars are spent annually on fake patent medicines, fraudulent food products, and incompetent services of quack doctors. The bureau then goes on to say that it will furnish trustworthy information regarding any medicinal preparation or foods or doctors that are extensively advertised, and do it without charge. The bureau recommends that no money be invested by reducing medicine, reducing soaps, reducing breads, or cures for cancer, rheumatism, consumption and epilepsy. What a pity it is that we haven't a few such business bureaus in the state of Indiana.

GARRULOUS nurses and doctors' assistants, together with garrulous doctors' wives have been the cause of a great deal of trouble and sometimes no little embarrassment to doctors. The less the doctor's wife knows about his professional work the better it is for all, and if she must know anything about the ailments of her husband's patients she ought to have the good sense not to talk about them. Furthermore, a doctor ought to tell his office girl or nurse that the first time he catches her talking on the outside about any of his patients or any of the work he is doing in the office he will discharge her. We know of some very estimable people who will not employ a perfectly competent and trustworthy physician because he has a garrulous nurse and a gossip wife. The doctor will be better off if he rids himself of both the nurse and the wife.

IN a recent novel called "Revelry," by Samuel

Hopkins Adams, the inference is drawn that the chief character of the story is the late lamented President Harding, who is depicted as a poker-playing, whiskey-drinking, easy-going, good natured pal who is lifted suddenly to the highest office in the land by his shrewd political friends. To the medical profession there is an interesting allusion to the United States Department of Public Health, which is cited as being so crooked that it even gets graft out of roach powder. If the novel is a story of the presidential life of Harding, even though it is thinly veiled as to the principals in the story, it probably will lead to some very unfavorable criticism of the author, even though he is a very prominent writer. Reference to the crookedness of the Public Health Department may require an explanation.

AMERICAN medicine must advance to and beyond the plane set by the Old World countries. We should have the best possible post-graduate opportunities for our own men. Give the student a common sense, practical foundation in college, offering special study afterwards for the attainment of specialism. Apprentice the new men to general practice similar to requiring a hospital internship. Provide adequate and interesting courses of study yearly for the general practitioner which will either coax him in or make it compulsory for him to freshen up his medical knowledge. Preserve the good old name "Doctor," inspiring and educating the public to co-operate with him in conserving health, for in the conservation of health must indeed lie the strength and wealth of our own Great Nation—Noerling, in *N. Y. State Journal of Medicine*, October, 1926.

A CANVASSER for *Hygeia* said that he was so surprised to have so many doctors say, "Oh, yes, I take *Hygeia*. I wouldn't be without it, and anyway I want to help along such a good thing." These answers came so regularly that the canvasser decided that he would investigate the matter, so he jotted down the names of those who were making the claims and upon checking up the subscription list it was found that only about one in ten of the doctors who made such remarks really were subscribing for *Hygeia*. His terse remark was, "Doctors can be just as big liars as other people." In reality, the reputable doctors of the United States ought to be ashamed of themselves for not subscribing for *Hygeia*, if for no other reason than to help the American Medical Association put over such a valuable periodical pertaining to individual and community health.

IN an editor's office it is necessary to make use of references of various kinds, and we admit having been inveigled into buying or subscribing for various publications of doubtful merit. This is particularly true concerning directories of specialists, hospitals, and other things pertaining to the practice of medicine. However, we

wish to go on record as saying that for the most part whenever we subscribe or buy such publications we are defrauded in a sense, for they are not thoroughly reliable, and are not worth what is paid for them. Today there is only one medical directory that is thoroughly trustworthy and that is the one published by the American Medical Association. It is the one and only one that should be consulted by the members of the medical profession if they desire to obtain trustworthy information of any kind pertaining to medical men or hospitals.

A CAMPAIGN is on to eradicate diphtheria from the State of New York, and an effort is being made to have all the people as well as all of the physicians and health officers of the state interested in it. It is expected that the use of toxin-antitoxin will banish diphtheria from New York. What is being accomplished in the state of New York can be accomplished in the state of Indiana, and we await with considerable anticipation the effect of the anti-diphtheria campaign that our State Board of Health is trying to put on with the assistance of a committee appointed by the president of the Indiana State Medical Association. We urge every doctor in Indiana to put his shoulders back of this campaign in the hope that it will accomplish some good for the state. There is absolutely no reason why we should be behind New York or any other state in protective health movements.

THE price of cotton has been going steadily downward, and it is said that the southern planters now are facing very serious losses in consequence of over-production. To the consumer this seems very strange, for there has been no noticeable reduction in the price of cotton goods. Take, for instance, the price of gauze used by hospitals and surgeons so generally, and we note that the present price is about as high as it was when the cotton planters were receiving high prices for their product. Crude oil is very low in price, so low in fact that it does not pay to pump some wells that normally prove very profitable. Yet gasoline and all the by-products of oil are higher than ever before. There is "a screw loose" when there is such a marked difference in the price of the crude article and the manufactured product which reaches the consumer. It isn't all made up through an increase in the cost of labor, and must, of necessity, go to those who manipulate the market.

IN a Northern Indiana city the newspapers are carrying full page advertisements of quack doctors, and less space for numerous medical fakes of one kind or another. The attention of the Better Business Bureau of the city in which these newspapers are located was called to this advertising, and it was pointed out to the bureau that such advertising is deceiving the people and in a sense is fraudulent and as damaging to the people



as any misstatement of merchants who would be called to account very promptly if they were guilty of such an offense. The aforesaid Better Business Bureau never showed even the courtesy of answering the communication regarding the fake medical advertising. We might put the query, "What is the object of a Better Business Bureau if it is not to protect the people from impositions and fraud?" It looks as though the quack doctors and the advertisers of fake remedies actually are able to *buy* their way wherever they go.

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IN this number of THE JOURNAL we print in the Correspondence Department a resolution adopted by the Clinton County Medical Society, at a recent meeting, which pertains to the defamatory attack by Bernarr Macfadden, in his publication known as *Physical Culture*, against the medical profession in general and the American Medical Association in particular. It will be remembered that the American Medical Association has exposed the Bernarr Macfadden publication as being inimicable to the best interests of the public. In consequence, it is the duty of every reputable medical man in the United States to oppose the Macfadden publications upon any and all occasions. Therefore, we are in entire sympathy with the resolution passed by the Clinton County Medical Society of this state, in which it calls for an accounting from those members of the regular medical profession who seemingly are aiding and abetting Macfadden in his work of exploiting himself and his fallacies.

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THE daily press announces that Lady Hamilton is touring America, speaking against vivisection, and that when she visited the stock yards in Chicago she was greatly distressed concerning the suffering of the dumb brutes there awaiting slaughter. It is reported that the fair supporter of anti-vivisection said that the Chicago Stock Yards ought to inaugurate slow music to allay the anguish caused the cattle awaiting execution. It is a fine piece of consistency when a woman will put the suffering and lives of dumb beasts ahead of the suffering and lives of human beings. The great discoveries in medical and veterinary science and those of most importance in saving or preserving human life as well as in saving the health and lives of dumb animals, have been accomplished through the medium of vivisection. It is a strange thing that Lady Hamilton and all the other enthusiasts for anti-vivisection lose sight of the great principle involved in the question of animal experimentation. However, progress wouldn't be progress if it came easy, and the development of science must have its radical objectors.

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IN getting up a program for a medical society it is a difficult thing to know how to get capable men to present papers or clinics and how to keep off the program men who are worthless or who, if

they have any ability, nauseate their audiences by exploiting themselves. In the final analysis the best program is the invited program, with a keen judgment as to what may prove interesting and profitable to the members of the society. The most interesting men to whom we ever have listened have been men who have been drafted to help fill in a program, but their selection has been due to wise judgment on the part of those responsible for the program. What the program committee of every society has to avoid is the so-called "pot boiler" who merely writes textbook papers, or puts in his own language, if he is not too lazy to copy outright, the ideas that he finds in some textbook. A resumé of current literature may be very interesting, but the plagiarist always is objectionable because someone usually knows that he hasn't an original idea in his head and that he is stealing the thunder of someone else.

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AN officer of one of the county medical societies in Indiana writes us that his medical society recently has taken into membership a medical man who apparently was well recommended but who turned out to be a notorious quack, with an unsavory reputation in former locations. The query is asked, "How are we to know anything about these men who ask for membership in our medical society?" The answer is easy. The man who asks for membership in a county medical society should have established a reputation in his new location and brought with him credentials from his last location. However, the one best bet is to make an inquiry at the bureau of investigation of the American Medical Association in Chicago where the record of every medical man in the United States, almost from the time of his birth up to the present date, is recorded. If the man is a quack or has a bad reputation of any kind, the A. M. A. will have him catalogued properly and any officer of a county medical society may obtain the information.

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It is rather surprising that rabies seems to be on the increase in Indiana. Last year the state treated 364 cases, and at the time that this editorial note is written there are fifty cases under treatment. In this connection it is well for medical men to know that there is a prophylactic treatment for rabies and that it can be administered by any physician. However, the State Board of Health distinctly states that if a person is bitten by an animal that is supposed to be rabid, the thing to do is to pen up the animal, so that it can do no harm, and watch it for further development of rabic symptoms. If it continues to be rabid, and shows more marked manifestations of rabies, then it is time to shoot the animal and send its head to the State Board of Health for examination. In the meantime nothing need be done for the person who has been bitten except to await the results of the findings, for if the antirabic treatment is begun within two weeks following the

bite by the rabid animal, the prophylactic treatment will have the desired effect, inasmuch as the the inoculation period of rabies is from twenty-eight to thirty days.

WITHIN the last two months we have had three letters from three different counties complaining about the admission of undesirable men to county medical societies. In one county the majority of the board of censors reported unfavorably upon a candidate and yet a minority of the society took it upon themselves to make the undesirable man a member. Almost similar tactics were adopted in another county medical society, and one of the prominent members wrote in saying that if the action was to stand he proposed to apply for membership in some other county medical society and wanted to be sustained in his demand for recognition in that way. In reality, the county medical society constitution and by-laws settles the question of membership, as every county medical society is the judge of the qualifications of its own members. However, the society ought to be interested in having as members only those men who are thoroughly worthy of associating with the members of the society, and last but not least, the majority should rule. By this we mean that a majority of the membership of the society should rule and not a majority of those who happen to attend a special or called meeting. On the whole, we never yet have found that it pays to take in undesirable members. If a man is undesirable in the beginning he remains undesirable to the end. You cannot reform him by taking him into a medical society. No man is entitled to membership in a reputable medical society until he has proved, over a considerable length of time, that he is deserving of a membership in that society. What might have been a fine medical society often has been ruined by one or two disturbers, and particularly disturbers who are decidedly unethical or commercial in their conduct.

WE have received a copy of what is called *Scientific Therapy and Practical Research*, a journal of the American Association of Medico-Physical Research, published at Lewiston, Pennsylvania. It is rather amusing to note that the heading of the journal is *Scientific Therapy*, yet the journal lauds the Abrams and the Koch cancer frauds. Incidentally, there is a criticism concerning what the editors believe to be rank injustice heaped upon the heads of Abrams and Koch by the American Medical Association. The bunch of exploiters for Abrams and Koch ought to know that the American Medical Association welcomes any therapy that is really scientific or offers any hope of alleviating or curing suffering humanity, and it doesn't make any difference who originates the therapy. All reputable men, to use a slang phrase, "are from Missouri and have to be shown," so whenever anything that is reported as new in therapy comes before the medical profes-

sion, the reputable men desire undisputed and unbiased proof of its value. Abrams not only was a rank failure before the medical profession, but before laymen as well, and the fallacy of his claims was made public through the *Scientific American*. Koch's claims also have been disproved, and he has been such an ardent exploiter of himself that the whole proposition is nauseating to respectable people. Neither Koch nor the late Abrams had anything to fear from the regular medical profession if they really had something worth while. The truth of it is their theories and their treatments were found to be nearly worthless. Their enterprise is kept going through specious advertising and the ever-prevalent medical suckers who are willing to bite at any bait, either because they are unusually credulous, or are anxious to adopt some method of exploiting themselves and haven't ingenuity enough to devise a method of their own.

## DEATHS

FREEMAN S. HUNTER, M.D., aged seventy-seven, of Bedford, died December 2, 1926. Dr. Hunter graduated from the Medical College of Ohio, Cincinnati, in 1876.

A. R. PATERSON, M.D., of Evansville, died November 24, 1926, aged fifty-three years. Dr. Paterson graduated from the Kentucky School of Medicine, Louisville, in 1902.

HENRY W. RIDPATH, M. D., of Indianapolis, died November 19, 1926, aged sixty-seven years. Dr. Ridpath graduated from the Central College of P. and S., Indianapolis, in 1884. He was not in active practice at the time of his death.

ELI B. MANN, M.D., of Muncie, died November 24, 1926, aged seventy-one years. Dr. Mann graduated from the Louisville Medical College in 1882. He was a member of the Delaware-Blackford County Medical Society, the Indiana State Medical Association and the American Medical Association.

## NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. J. B. SALB, of Seymour, has been made director of the bacteriological laboratories of the Indiana State Board of Health.

FOR the second time in succession, the Rush County Medical Society is first in getting in its membership dues, 100 percent!

THE twelfth annual conference of the National Committee for the Prevention of Blindness was



held in the Russell Sage Foundation Building, New York City, December 1 and 2, 1926.

THE Fountain-Warren County Medical Society held a meeting at Attica, December 2. Papers were presented by Dr. W. D. Gatch and Dr. Charles P. Emerson, both of Indianapolis.

THE Palmer House, of Chicago, has recently installed a complete hospital under the direction of a physician with a corps of medical men and nurses, for the convenience of guests and employees.

THE regular dinner meeting of the Muncie Academy of Medicine was held at the Hotel Roberts, Friday, December 10. Dr. Gordon New, of the Mayo Clinic, Rochester, Minnesota, presented a paper on "Malignancies of the Chest."

DR. FRED TERFLINGER, of Logansport, has been made company physician and surgeon for the local division of the Pennsylvania railroad. Dr. Terflinger succeeds Dr. J. P. Hetherington, who has been granted an indefinite leave of absence.

DR. W. T. GOTT, of Evansville, has resigned as secretary of the Indiana State Board of Medical Registration and Examination, which position he has held for the last twenty-seven years. Dr. Gott will retain his membership on the Board.

THE last meeting of the Madison County Medical Society for the year 1926 was held at the Grand Hotel, Anderson, December 21. The January meeting will be held in Elwood, January 18, with the program in charge of Dr. W. Merle Hoppenwrath.

THE Clinton County Medical Society held a meeting at Frankfort, December 2. The following officers were elected for 1927: President, Dr. L. L. Harding, Frankfort; vice-president, Dr. Ivan E. Carlyle, Sedalia; secretary, Dr. F. A. Beardsley, Frankfort.

DR. G. M. NIE, of Huntington, was elected president of the Huntington County Medical Society for 1927 at the meeting held December 7. Dr. R. S. Galbreath, of Huntington, was elected vice-president and Dr. S. M. Casey, of Huntington, secretary-treasurer.

THE Central Laboratories, of Indianapolis, have announced their re-organization to cover the entire field of laboratory examinations for diagnostic purposes. To their staff they have added Dr. Henry R. Alburger as pathologist and John Vie as director of laboratories.

DR. H. D. FAIR, of Muncie, was elected president of the Delaware-Blackford County Medical Society at the meeting held December 3, at the

Hotel Roberts, Muncie. Other officers elected were Dr. French, of Hartford City, vice-president, and Dr. Tom Owens, Muncie, secretary-treasurer.

THE Sullivan County Medical Society has elected the following officers for 1927: President, Dr. J. H. Neff, Sullivan; vice-president, Dr. J. T. Oliphant, Farmersburg, and secretary-treasurer, Dr. Harry C. O'Dell, Farmersburg. The society will hold regular meetings the first Wednesday night of each month.

THE Tippecanoe County Medical Society held its regular meeting December 9. Dr. Joseph C. Beck, of Chicago, conducted a clinic at St. Elizabeth Hospital, Lafayette, and following a banquet, Dr. Beck presented a paper, his subject being, "The Management of Complication of Ear, Nose and Throat Diseases Prevalent During the Winter Months."

THE members of the Jay County Medical Society held a meeting at the Portland Country Club, December 3. Following a dinner, Dr. Charles Beall, of Fort Wayne, presented a paper, his subject being, "Diabetes." The following officers, all of Portland, were elected for the year 1927: President, Dr. J. E. Nixon; vice-president, Dr. Charles Paddock; secretary, Dr. A. C. Badgers (re-elected).

Two prizes of fifty thousand dollars each have been offered by William Lawrence Saunders, of New York, for discoveries of the causation, prevention and cure of cancer. This offer was made on December 15, 1926, and will stand for three years. The donor expects to renew it, if necessary. Information as to how persons should proceed who wish to present their discoveries for consideration will be announced later. The decision upon which these awards shall be made is to be determined by the American Society for the Control of Cancer and approved by the American Medical Association and the American College of Surgeons.

PHYSICIANS and medical students were made welcome as guests of the Indiana University School of Medicine at the regular monthly seminar held at the medical school building, Indianapolis, December 17. Papers were presented by Dr. Alfred O. Adams, resident physician of the James Whitcomb Riley Hospital, whose subject was "Full-Thickness Skin Grafts"; by Dr. Harold M. Trusler, whose subject was "The Blood Chemistry of Acute Intestinal Obstruction," and by Dr. B. B. Turner, whose subject was "Statistical Orientation, or How Nature Builds." Cases of especial interest from the Indiana University hospitals were presented for study and discussion.

In addition to the articles already enumerated,

the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Cutter Laboratory:

Tetanus Antitoxin for Human Use, 10,000 units.

Tetanus Antitoxin for Human Use, 20,000 units.

Typhoid Prophylactic, 1 cc. syringe.

Typhoid Prophylactic, 20 cc. bottle.

Parke, Davis & Co.:

Scarlet Fever Streptococcus Antitoxin Concentrated Globulin-P. D. & Co., 1 cc.

THE American Association for the Study of Goiter will hold its annual clinical meeting at Philadelphia, January 31st and February 1st and 2nd. An unusually high class scientific program has been arranged. The forenoons will be devoted to clinics at the University of Pennsylvania Hospital and the afternoons to scientific sessions in the assembly room of the Bellevue-Stratford Hotel. All members of state societies are cordially invited. The officers of this association are Dr. Emil Goetsch, Brooklyn, New York, president; Dr. Gordon S. Fahrni, Winnipeg, Canada, vice-president; Dr. J. D. Moschelle, Indianapolis, Indiana, recording secretary; Dr. Kerwin Kinard, Kansas City, Mo., corresponding secretary, and Dr. J. R. Yung, Terre Haute, Indiana, treasurer.

## CORRESPONDENCE

MACFADDEN'S ATTACK ON THE A. M. A.  
Franklin, Indiana.  
December 12, 1926.

To the Editor of THE JOURNAL:

At a regular December meeting of the Clinton County Medical Society, held at Frankfort, Indiana, a resolution was adopted unanimously concerning the Bernarr Macfadden attacks upon the medical profession and the A. M. A. through the Macfadden publications, and especially the publication known as *Physical Culture*. The resolution is as follows:

WHEREAS, There is a defamatory attack being carried on by one Bernarr Macfadden in a publication known and circulated as *The Physical Culture Magazine*, against the medical profession in general and the American Medical Association in particular, and

WHEREAS, Macfadden is making public claims that the evidence is being furnished for this attack by the members of the regular medical profession itself, therefore,

BE IT RESOLVED, That the attention of the state and national medical associations be called to this attack, and be it

FURTHER RESOLVED, That this society requests that the journals of both the state and national medical associations publish the biographies of the said reputable witnesses, insofar as their standing and professional attainments are concerned, and

BE IT FURTHER RESOLVED, That a copy of this resolution be sent to the editor of THE JOURNAL of the Indiana State Medical Association at once.

You are asked respectfully, Mr. Editor, to give this resolution publicity, and such editorial comment as you think indicated.

Sincerely yours,

F. A. BEARDSLEY,

Secretary Clinton County Medical Society.

## MEDICAL RELICS

Indianapolis, January 2, 1927.

Editor THE JOURNAL:

Recently it has been our very pleasant privilege to look through the private library and collection of an aged and honored practitioner in a southern county. This grand old man of the profession has preserved a great many most interesting and valuable relics of the practice of his art in the earlier days of Indiana. Old books, periodicals and surgical instruments may have absolutely no practical or current value, but should be preserved because of their historical interest and cultural value. Ours is a grand and noble profession; it grows into new forms constantly, but should not disdain its splendid past.

As we were looking at these priceless mementoes of by-gone days, it occurred to us that they might very easily be lost. They were housed in a frame building which was a fire-trap. The man, who treasured them, told me that his family regarded them as so much junk. Which means that in case the owner should die—and he is already old—the family would clean house. Besides, as it is, no one can see them except when invited to do so by the busy old man of medicine who fondles them. There is no file or index, no written record of their significance or history. It seems to us that it would be a fine thing if he might put a clause in his will turning such material over to the historical society of the county, or the local medical society, or even better yet to the library of the Indiana University School of Medicine, which is the only medical school in the state and which being a state institution, should be interested in the preservation of medical history of the state. There the material could be catalogued, filed, and kept in perpetuity to the honor and glory of the profession.

There must be thousands of copies of old books and periodicals which are thrown back in dusty corners or burned at housecleaning time. There is nowhere in the state a collection of such old medical journals as have been published in Indiana in the days gone by that is anywhere near complete. Lay libraries would have comparatively little use for such, but medical societies and medical school libraries should gladly serve as repositories for such material. Let us suggest that we honor these fine old men of the past—God bless 'em even if they did hold our noses and make us take those dreadful concoctions of theirs—by preserving the record of their endeavors. And let us also suggest that they, if they still be living, or their heirs, if they have gone to their reward, honor us by permitting us to use, revere and preserve their handiwork.

Respectfully,

THURMAN B. RICE, M.D.

## SOCIETIES AND INSTITUTIONS

### BUREAU OF PUBLICITY

November 15, 1926.

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D.; S. E. Earp, M.D.; Murray N. Hadley, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held November 8 read and approved.

The following bills were approved for payment:

Ashe and Spitznagle, letter paper.....	\$2.10
W. K. Stewart Co., wrapping paper.....	1.10

Total .....\$3.20

A letter received from the councilor of the Sixth District containing a suggested letter to the various county medical societies. Letter approved by the Bureau of Publicity and the secretary was instructed to send copies to the various councilors.

Report prepared upon periodic health examination work in Indiana. This report is to be read by the executive secretary at the conference on periodic health examinations to be held in Chicago, November 20.



A letter was received from the Spencer Lens Company and the secretary was instructed to get in touch with the New York State Medical Society and the Kings County Medical Society asking them for further information upon the series of films put out by the Spencer Lens Company.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole November 22, 1926.

WM. N. WISHARD, M.D.,  
Chairman.  
THOS. A. HENDRICKS,  
Secretary.

#### BUREAU OF PUBLICITY

November 22, 1926.

Meeting called to order at 5:00 o'clock.

Present: S. E. Earp, M.D.; Murray N. Hadley, M.D. and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held November 15, read, corrected and approved.

The release, "Typhoid Fever in Winter" read, corrected and approved for release Monday, November 29.

Request received from the LaPorte County Medical Society for a speaker to give periodic health examination demonstration on December 9.

The executive secretary made a report upon the State Secretaries' Conference at Chicago, November 19 and 20.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole November 29, 1926.

WM. N. WISHARD, M.D.,  
Chairman.  
THOS. A. HENDRICKS,  
Secretary.

#### BUREAU OF PUBLICITY

November 29, 1926.

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D.; S. E. Earp, M.D.; Murray N. Hadley, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held November 15 and November 22 read and approved.

The release "Why Change?" read, corrected and approved for publication Monday, December 6.

Speaker obtained for LaPorte County Medical Society to give periodic health examination demonstration on December 9.

Member of the committee reports from chairman of the Council of the Indianapolis Medical Society concerning proposed Periodic Health Examination meeting. The chairman and secretary of the Bureau were instructed to make further attempts to get an out-of-town speaker for Periodic Health Examination meeting of Indianapolis Medical Society.

The secretary was instructed to get material together in order that report may be made to the budget committee of the state association in regard to funds for 1927.

A letter was received from Spencer Lens Company in regard to films for county medical societies and the secretary was instructed to get addition definite details concerning the proposition from this company.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole December 6, 1926.

WM. N. WISHARD, M.D.,  
Chairman.  
THOS. A. HENDRICKS,  
Secretary.

#### INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

December 6, 1926.

Meeting called to order at 5:00 o'clock.

Present: S. E. Earp, M.D.; Wm. N. Wishard, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held November 29 read, and approved.

The following bills were approved for payment:

American Linen Supply Co.	\$ 1.60
Simmons Ink Company	3.50
American Medical Association	.60
Kautz Stationery Co.	4.45
Central Press Clipping Service	5.00
Hume-Mansur Co., rent and light	2.00

Total \$17.15

The release, "Diphtheria Prevention Campaign" read, corrected and approved for publication Monday, December 13.

Report upon the diphtheria immunization campaign made by the chairman of the diphtheria committee of the State Medical Association. This committee was authorized by action of the House of Delegates at the annual convention at West Baden. The chairman reports formation of a campaign in which the state medical association and the state parent-teachers' association will co-operate with the State Board of Health.

A letter was received from the secretary of the Indianapolis Medical Society asking the Bureau to continue its efforts to obtain an outside speaker for the special periodic health examination meeting.

A letter was received from the Spencer Lens Company and the Kings County Medical Society in regard to the purchase of a machine and preparation of medical lectures. As the Kings County Medical Society had said it had not gone very far in this matter at the present time, the Bureau of Publicity moved to lay this matter on the table for the present.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole December 13, 1926.

WM. N. WISHARD, M.D.,  
Chairman.  
THOS. A. HENDRICKS,  
Secretary.

#### BUREAU OF PUBLICITY

December 13, 1926.

Meeting called to order at 5:00 o'clock.

Present: Wm. N. Wishard, M.D.; S. E. Earp, M.D.; Murray N. Hadley, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held December 6 read, corrected and approved.

The proposed release, "Measles Problem Solved," which was submitted to the Bureau was read and the secretary was instructed to make further investigation concerning statements made in this article before publication.

Report received from secretary of the Grant County Medical Society upon Marion Kiwanis Club meeting, December 8. Paul O. Sampson was to address the Kiwanis Club upon that date but his engagement was cancelled when the president of the club was informed that the State Board of Health and the American Medical Association would not endorse the National Health League. The Bureau of Publicity supplied another speaker to fill that date.

Letter received from secretary of the Delaware-Blackford County Medical Society asking whom the Bureau might suggest for speakers upon a program in which the economic and sociological status of physicians were discussed.

A letter was received from the councilor of the 6th district and the secretary was instructed to place the *Cambridge City Tribune*, Cambridge City, Ind., upon the

regular mailing list to receive our releases.

A letter was received from a physician of Howard county in regard to clipping which appeared in *Kokomo Despatch* on December 8. The secretary was instructed to trace down source of the clipping and get any other information which might help the Howard County Medical Society in taking suitable action.

A letter from a Brazil physician referred to Bureau by editor of the *Indianapolis Medical Journal*.

The committee completed its estimate of expenditures for the coming year to present before the Budget Committee at its meeting December 17.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole December 20, 1926.

WM. N. WISHARD, M.D.,  
Chairman,  
THOMAS A. HENDRICKS,  
Executive Secretary.

#### TIPPECANOE COUNTY MEDICAL SOCIETY

December 9, 1926.

The Tippecanoe County Medical Society met in regular session at the Hotel Lahr, President Loop presiding. Thirty-five members were present.

The applications for membership of S. E. McClure, E. L. Lanman, Will W. Washburn, S. J. Miller and W. Ivan King were read for the second time. All were duly elected to membership in our society.

Election of officers resulted as follows: President, Dr. F. P. Hunter; vice-president, Dr. H. J. Laws; secretary, Dr. J. C. Burkle, (re-elected); treasurer, Dr. Chas Hupe, (re-elected); censor for two years, filling the unexpired term of the late Dr. Geo. F. Keiper, Dr. John S. Morrison; censor for three years, Dr. F. L. Pyke.

Dr. Geo. W. Dewey, who recently located at Goodhue, Minnesota, was granted a transfer from our society to the Goodhue County Medical Society, Goodhue, Minnesota.

A very interesting clinic was held at St. Elizabeth Hospital from 2:30 to 5:30 p. m., by Dr. Joseph C. Beck and his assistant, Dr. Burns. Three cases were presented. The first, one of blocking of the nasal cavities; second, one of absence of the bridge of the nose, a perforated septum, a perforation of the soft palate, with much scar tissue in the pharynx, following an early tonsil operation. The third case was one with a history of a child ten years old that had considerable ear disturbance resulting in a double mastoid operation, the last operation being in July, 1926. Following this operation the child began losing sight, until at present the right eye is negative and the left eye almost so. After going over the case carefully, Dr. Beck decided to do a decompression operation, going in over the left temporal region. A marked edema of the brain was found. The cause was not fully determined. Dr. Beck held to the idea that there was a partial obstruction of the free passage between the ventricles at times becoming more nearly closed than at others. He did not feel that the cause was an abscess. The definite cause was not determined. Three hours following the operation the child was able to distinguish the brighter colors.

Following the banquet Dr. Beck spoke upon the subject, "The Management of Complications of Ear, Nose and Throat Diseases Prevalent During the Winter Months."

Dr. Beck presented this very clearly and concisely. A rising vote of thanks was extended Dr. Beck and Dr. Burns for the clinic and address.

The meeting adjourned.

J. C. BURKLE,  
Secretary.

#### FLOYD COUNTY MEDICAL SOCIETY

December 10, 1926.

The Floyd County Medical Society met in annual meeting at the Tavern Hotel on the above date with the

president, Dr. W. A. Hall, in the chair, and a large number of members present.

Roll called and minutes of previous meeting read and approved.

A communication from Dr. John Asa Gibbons, of Mitchell, Indiana, was read concerning the introduction of a bill to be presented before the coming session of the state legislature to repeal the present six-year outlaw that is now on our statute, as this law creates a hardship on physicians and businessmen.

A motion was made and seconded, indorsing the communication and for the Legislative Committee to confer with our representative in regard to this matter.

This being the annual meeting, in which the election of officers takes place, the president appointed the following nominating committee: Drs. J. Y. McCullough, C. C. Funk and P. R. Pierson, who placed in nomination as follows: For president, Dr. Fred Bierly, of Elizabeth; vice-president, Dr. W. H. Garner; secretary-treasurer, Dr. P. H. Schoen; censors, Drs. R. W. Harris, W. L. Starr and H. B. Shacklett.

A motion was made to accept the committee's report and instruct the secretary to cast a unanimous vote for the ticket. Motion carried.

A turkey dinner was served by the Tavern people, which was very much enjoyed by all. This banquet feature is an annual event with the Floyd County Medical Society, and always looked forward to by its members.

After a short social hour, in which a number of topics were discussed, there being no further business, the meeting adjourned.

W. A. HALL,  
President.  
P. H. SCHOEN,  
Secretary.

#### HUNTINGTON COUNTY MEDICAL SOCIETY

December 18, 1926.

The December meeting of the Huntington County Medical Society was held December 7 at the Hotel LaFontaine. Reports were as follows: "A New Method for the Treatment of Body Burns" by Dr. Wimmer and "Methods Used in Obstetrics" by Dr. R. G. Johnston. Election of officers resulted as follows: President, G. M. Nie; vice-president, R. S. Galbreath; secretary-treasurer, S. M. Casey. At the next meeting, January 4, Dr. J. H. Warvel, of Indianapolis, Indiana, will read a paper on, "Diabetic Coma."

Yours truly,  
G. M. NIE, M.D.,  
President.

#### WABASH COUNTY MEDICAL SOCIETY

December 24, 1926.

At the December meeting of the Wabash County Medical Society, held at Wabash, December 16, 1926, the following officers for the ensuing year were elected: President, George L. Shoemaker, North Manchester; vice-president, J. W. G. Steward, Wabash; secretary-treasurer, O. G. Brubaker, North Manchester (re-elected).

State Representative-elect E. E. Eikenberry, of Wabash, was the speaker of the evening. We are sure that the "M.D.'s" have a loyal friend in Mr. Eikenberry. He stands for high ideals and rigid standards.

O. G. BRUBAKER,  
Secretary.

#### KOSCIUSKO COUNTY MEDICAL SOCIETY

December 23, 1926.

Kosciusko County Medical Society met at Hotel Hays, Warsaw, Indiana, December 21, 1926, for the annual dinner meeting and election of officers. This meeting was also in honor of Dr. C. R. Long, of Piercetown, Indiana, who has practiced medicine in Kosciusko county for forty-six years, and who has also been an active member of our society for the same length of time. This society presented a gift to Dr. Long as a token of its esteem.



The following officers were elected for the ensuing year: President, T. S. Schuldt, Pierceton, Ind.; vice-president, F. H. Kelly, Argos, Ind.; secretary-treasurer, Paul A. Garber, Sidney, Ind.; H. F. Steele, Claypool, Indiana, hold-over delegate to state meeting.

Kosciusko County Medical Society offers the following as a report of its activity during the year 1926:

We started the year with twenty-four members, and lost one by death, namely, L. W. Ford, Syracuse, Indiana; and one by transfer to Laporte county, namely, F. H. House.

We had eleven meetings during the year with a total membership present at these meetings of one hundred and nine. Two of our meetings were joint meetings, one with the County Bar Association and one with the Dental Association. At five of our meetings papers were prepared and given by local men; at three of our meetings outside doctors prepared and gave papers.

From our membership in this county, we find that during the past year one of our members was vice-president of the Indiana State Medical Association, one is a member of the State Legislative Committee, one was councilor of the Thirteenth district and one has been elected president of the Thirteenth District Medical Society. This is a record of which our society may well be proud and we hope that we may continue with a similar record in the future.

PAUL A. GARBER,  
Secretary.

#### INDIANA STATE MEDICAL ASSOCIATION THE COUNCIL

The regular mid-winter meeting of the Council of the Indiana State Medical Association convened at 10:15 a. m. Friday, December 17, 1926, at the Indianapolis Athletic Club, Indianapolis.

Upon the call to order by Wm. R. Davidson, the chairman, the roll call showed the following present:

Charles N. Combs, Terre Haute, president 1926.  
Frank W. Cregor, Indianapolis, president 1927.  
George R. Daniels, Marion, president 1928.  
William A. Doeppers, Indianapolis, treasurer.  
Albert E. Bulson, Jr., Fort Wayne, editor of THE JOURNAL.

##### Members of the Council

- 1st District—Wm. R. Davidson, Evansville.
- 2nd District—No representative.
- 3rd District—Walter Leach, New Albany.
- 4th District—C. E. Gillespie, Seymour.
- 5th District—Joseph H. Weinstein, Terre Haute.
- 6th District—E. C. Denny, Milton.
- 7th District—O. T. Scamahorn, Pittsboro.  
E. E. Padgett, Indianapolis, Councilor-elect.
- 8th District—M. A. Austin, Anderson.
- 9th District—F. S. Crocket, Lafayette.
- 10th District—E. E. Evans, Gary.
- 11th District—C. S. Black, Warren.
- 12th District—No representative.
- 13th District—H. M. Hall, New Carlisle, Councilor-elect.

Thomas A. Hendricks, executive secretary.

Reading of the minutes of the last meeting at West Baden in September, 1926, was dispensed with as these were printed in the October number of THE JOURNAL and approved.

Report of the councilors by districts showed every district in good condition and all but a few counties actively at work. Several districts reported splendid results from tri-county organizations.

Following the district reports, the officers of the Association made short informal surveys. Charles N. Combs, of Terre Haute, retiring president, mentioned the following three accomplishments as the outstanding feature of the past year: Adoption of the new constitution and by-laws, bringing the code under which the Association is functioning up-to-date; the institution of the secretaries' conference, and the establishment of the budget plan.

Frank W. Cregor, of Indianapolis, president-elect, complimented the councilors upon the good reports for each district.

William A. Doeppers, treasurer, submitted the following financial report:

#### FINANCIAL REPORT, 1926

##### General Fund:

On hand Jan. 1, 1926.....	\$15,198.47
Membership dues .....	18,797.00
Interest on certificate of deposit.....	631.87
Rental on booths at convention.....	3,023.29

Total .....\$37,650.63

##### Medical Defense:

Balance on hand Jan. 1, 1926.....	\$ 2,447.80
Liberty Bonds .....	5,000.00
Interest for the year.....	212.50

Total .....\$ 7,660.30

General Fund .....\$37,650.63

Medical Defense .....7,660.30

Grand Total .....\$45,310.93

##### Disbursements:

Subs. to JOURNAL.....	\$ 5,364.00
Treasurer (bond and safety box).....	59.00
Printing .....	439.72
Councilors .....	175.31
Medical defense case.....	200.00
Committees .....	565.12
Office expense and permanent equip.....	1,883.39
Annual sessions .....	2,400.75
Salary of executive secretary.....	5,249.92
Salary of stenographers.....	3,085.00
Refund of dues two members.....	14.00

Total .....\$19,436.21

Total receipts .....\$45,310.93

Total disbursements .....19,436.21

Balance .....\$25,874.72

#### REPORT SHOWING NET GAIN FOR 1925 AND 1926

Membership dues .....	\$18,408.00
Exhibits at Convention.....	1,970.00
Interest .....	404.00

Total .....\$20,782.00

Total receipts, 1925.....\$20,782.00

Total expenditures .....16,640.76

Balance .....\$ 4,141.24

Balance .....1926

Membership dues .....\$18,797.00

Interest on Liberty Bonds.....212.50

Interest on certificate of deposit.....631.87

Rental from exhibit space at Convention.....3,023.29

Total .....\$22,664.66

Total receipts, 1926.....\$22,664.66

Total expenditures .....19,136.21

Balance .....\$ 3,528.45

#### CONVENTION AT WEST BADEN, SEPTEMBER, 1926

Income from rental of booths.....	\$ 3,000.00
Interest .....	23.29

Total .....\$ 3,023.29

##### Expenditures:

Booths and signs.....	\$ 985.95
Printed programs .....	111.25
Reporters .....	454.61
Registration clerk .....	10.00
Badges .....	150.19
Printing and circulars.....	36.84
Expense of speakers.....	443.01
Hotel expense for secretary, three clerks, and exhibit .....	158.90

Railroad fare for office employees and incidentals at convention.....	50.00
Total .....	\$ 2,400.75
Total income, 1926 .....	\$ 3,023.29
Total expense .....	2,400.75
Balance .....	\$ 622.54
Rental for 1 booth yet due.....	27.50
Total income, 1925 convention.....	\$ 1,970.00
Total expense .....	2,344.27
Deficit .....	\$ 374.27

## MEDICAL DEFENSE FUND

Balance on hand Jan. 1, 1926.....	\$2,447.80
Liberty Bonds .....	5,000.00
Interest on bonds .....	212.50
Total in fund.....	\$7,660.30
Expenditures:	
Judge H. Hanan, fees.....	\$ 200.00
Balance .....	\$7,460.30

 CONTENTS IN SAFETY DEPOSIT BOX  
 DECEMBER 15, 1926

Certificate of Deposit No. 4423.....	\$15,000.00
Liberty Bonds, Fourth Liberty Loan:	
G 01814397 .....	1,000.00
H 01814398 .....	1,000.00
J 01814399 .....	1,000.00
K 01814400 .....	1,000.00
G 00062717 .....	1,000.00
Total .....	\$20,000.00

Dr. Doeppers also proposed that the council authorize the employment of an auditor to review the books of the Association and help in getting the new budget system established. Upon the motion of Dr. Bulson, Dr. Doeppers' suggestion that the books be submitted to an audit was accepted.

Albert E. Bulson, Jr., editor of THE JOURNAL, in his report stressed the need of increasing the interest of the profession in the periodic health examination movement. He also urged that the Association co-operate in every way possible with the State Board of Health in the diphtheria immunization campaign.

Under the heading, "Suggestions and Proposals for the 1927 Convention at Indianapolis," Dr. Bulson urged the continuation of the separate section meetings. A letter was read from B. D. Ravdin, secretary of the Section on Ophthalmology and Otolaryngology, in regard to the failure of the Friday morning section meetings. Drs. Crockett, Black, Scamahorn, Padgett, Gillespie, Hall and Gregor spoke in favor of centralizing our efforts on the general scientific meetings rather than upon the separate section meetings. The principal thought expressed by those favoring the general meetings was that the programs should be essentially of interest to the general practitioner and the general surgeon. "Scientific papers should not be too highly technical," said one physician voicing the sentiment of the council. Another physician said that the sentiment throughout the state was against the section and "that we should have more general meetings."

The following tentative program for the coming convention was suggested and approved in its general aspects by the council.

Wednesday afternoon, meeting of House of Delegates.

Thursday morning, general meeting.

Thursday afternoon, section meetings and clinics.

Friday morning, general meeting.

Friday afternoon meeting of the House of Delegates.

Dr. Hall spoke of the tremendous success of the tri-state meetings and suggested that the state Association study the tri-state methods and take a "leaf" from the tri-state book.

The value of clinics over merely written papers was stressed and Dr. Doeppers extended an invitation from

the City Board of Health to the Indiana State Medical Association to use the City Hospital in any way it desired in conducting post-graduate work and clinics during the next convention. Dr. Doeppers stated that the City Hospital "would see that we are fed."

The Claypool Hotel, the new Armory, and the City Hospital were discussed as locations for the headquarters for the 1927 convention. Upon the motion of Dr. Bulson the council voted against the installation of a scientific exhibit at the next session, due to the expense of such an exhibit and due to the fact that stress should be laid upon clinics and actual demonstration work.

The council reviewed a letter from Paul Nicholas Leach, director of the Scientific Exhibit of the American Medical Association, announcing the plan for a scientific exhibit at the American Medical Association session at Washington in May, 1927.

Membership reports by districts were supplied to each councilor. Total membership for 1926 was 2,683 as against a total membership in 1925 of 2,628, a gain of 55 for the year. Summary of the districts follows:

	Dec. 31 1926	Dec. 31 1925	Loss— Gain	Delinquent	New Members	Removals	Reinstatements	Deceased	Honorary
1st District	157	155	2	9	6	—	3	3	—
2nd District	130	123	7	2	5	1	4	8	—
3rd District	126	118	8	6	6	4	7	2	—
4th District	137	129	8	2	8	3	4	4	—
5th District	168	164	4	7	6	3	9	7	—
6th District	162	165	—3	8	1	5	7	6	—
7th District	486	481	5	22	29	28	3	9	3
8th District	165	166	—1	5	5	2	1	6	1
9th District	200	196	4	5	10	4	1	5	—
10th District	213	196	17	7	19	4	4	2	—
11th District	208	214	—6	9	2	5	4	5	—
12th District	246	237	9	7	14	3	6	5	—
13th District	285	284	1	7	11	2	—	5	1
Total .....	2,683	2,628	55	96	122	64	53	69	5

A suggestion came before the council that an S. O. S. committee be appointed which can be called upon for emergency work in rounding up programs and resurrecting dead societies. Suggestion was referred to the Bureau of Publicity.

The executive secretary was authorized to attend the annual session of the American Medical Association at Washington, May 16-20, 1927.

The subject of periodic health examinations came before the Council for discussion, and the report showed that Indiana stands well up in the line in this work along with Illinois, Pennsylvania, New York and Missouri that are especially active in this campaign.

The section in regard to "physicians' certificates" contained in Bulletin 5, December 13, 1926, of the Indiana High School Athletic Association, was brought before the Council for consideration. This bulletin reviews the new requirement which provides that each student "participating in any inter-school basketball, football and track meet shall have a certificate (from his physician) on file in the (high school) principal's office. The bulletin says in part, "The physical examination should be carefully and officially made by regularly licensed physicians. \* \* \* Certificates issued on the basis of anything less than a physical examination by reputable physicians will do more harm than good."

The Council referred this bulletin to the Bureau of Publicity after commenting favorably upon the action of the Indiana High School Athletic Association in this matter.

A letter from Homer F. Sanger, of the Council on Hospitals and Medical Education of the American Medical Association, stressing the importance of having a state committee on hospitals, was read. (The new constitution and by-laws adopted at the West Baden session provide for a committee on medical education and hospitals.)

Resolution of the Clinton County Medical Society concerning attacks by Bernarr Macfadden upon the medical profession received and filed.



David Ross and A. L. Marshall, of Indianapolis, were elected as members of the Executive Committee for 1927. The Council named no chairman for the Executive Committee and recommended that the committee select its own chairman. The Council also recommended that the House of Delegates at the next meeting amend the by-laws to provide a three-year term for each member of the Publicity Bureau.

Dr. Bulson made a motion that no state dues be returned to any person who has been a member of his county and state society and has been expelled from either of these organizations. Dr. Daniels spoke against the resolutions. With consent of Dr. Cregor, who seconded the resolution, Dr. Bulson withdrew the motion.

The Council adjourned for luncheon and heard reports from the following committee chairmen:

Frank S. Crockett, chairman Industrial and Civic Relations Committee.

David Ross, chairman Executive Committee.

Frank Cregor, chairman Legislative and Public Policy Committee.

E. E. Padgett, chairman Program Committee.

E. O. Harrold, chairman Secretaries' Committee.

Jas H. Stygall, chairman Diphtheria Committee.

Dr. Cregor introduced E. R. Zimmerman, chairman of the Legislative Committee for 1927.

Upon the motion of Dr. Cregor, seconded by Dr. Austin, the secretaries' conference was recognized by the Council as an integral part of the Association.

Following the luncheon, Dr. Wm. F. King, secretary of the State Board of Health, upon the invitation of the Council, spoke upon the diphtheria immunization campaign. He also spoke upon the fact that rabies was worse today than at any other time. He said that two human deaths occurred in Indiana in the past six months from rabies, and that fifty cases were under observation at the present time. He emphasized the fact that treatment of rabies should be done by the individual physicians, and that one does not have to come to Indianapolis and receive treatments from the State Board of Health.

The Council authorized the Publicity Committee to co-operate with the State Board of Health in carrying on a campaign concerning the distribution and administration of rabies antitoxin, tetanus serum, and diphtheria toxin-antitoxin.

The resolution of the Indiana Division of the Isaac Walton League of America was presented to the Council and referred to the Legislative Committee.

Dr. Walter Leach presented the following application from physicians of Harrison County for a charter:

"We, the undersigned licensed and practicing physicians of Harrison County, in the State of Indiana, do hereby make application to the Council of the Indiana State Medical Association for a charter for the association of physicians in Harrison County, Indiana, to be known as the Harrison County Medical Association.

"William W. Weaver, Elizabeth, Ind., graduated 1925, licensed 1925.

"William E. Amy, Corydon, Ind., graduated 1903, licensed 1910.

"George F. Martin, Corydon, Ind., graduated 1884, licensed 1886.

"Oscar R. Meyer, Lanesville, Ind., graduated 1907, licensed 1908.

"A Mathys, Mauckport, Ind., graduated 1909.

"W. H. Reader, New Amsterdam, Ind., graduated 1878.

"L. F. Glenn, Ramsey, Ind., graduated 1903, licensed 1903.

"G. D. Baker, Crandall, Ind., graduated 1910, licensed 1910.

"L. C. Winders, licensed by law."

Following a short talk by Dr. Leach, councilor of the Third district, in which Harrison County is located, the Council authorized the awarding of a charter to the physicians of Harrison County.

The work of Better Business Bureaus was discussed by the Council. Upon a motion by Dr. Evans, seconded by Dr. Austin, the Publicity Bureau was instructed to

write the Postmaster-General in regard to the use of the mails for fraudulent medical advertising purposes.

A communication from Wm. H. Stemm, of North Vernon, former president of the Association, came before the Council for consideration. Dr. Stemm's communication pointed out the fact that in 1919 the House of Delegates passed a resolution appointing the Council a permanent committee to co-operate with the State Board of Health. The Council voiced the opinion that as this was a ruling in 1919, it was not effective under the new constitution which abrogated all rulings passed previously to the adoption of the new constitution.

Dr. Davidson was re-elected chairman for the coming year.

A meeting of the budget committee was called to take place at headquarters office, 1004 Hume Mansur Building, following the adjournment of the Council. The Budget Committee is composed of the following members:

Charles N. Combs, Terre Haute, president 1926.

Frank W. Cregor, Indianapolis, president 1927.

George R. Daniels, Marion, president 1928.

Wm. R. Davidson, Evansville, chairman Council.

Wm. A. Doeppers, Indianapolis, treasurer.

Thomas A. Hendricks, Indianapolis, executive secretary.

There being no further business, the Council adjourned.

THOMAS A. HENDRICKS,  
Executive Secretary.

## ABSTRACTS

### SELECTING HOSPITAL FOR INTERNSHIP

Henry A. Christian, Boston (*Journal A. M. A.*, May 15, 1926), feels that medical schools are coming to a very general recognition of the internship as part of the plan of education of the medical student, and whether they award their degree of doctor of medicine before or after the completion of the internship, the medical curriculum is planned on the assumption that the internship will be taken to round out the student's medical course, and that, without it, he will have had an incomplete preparation to begin the practice of medicine. In other words, the internship is recognized as having a definite educational value; to be satisfactory for the student who has just completed his medical curriculum, it must have such a value. With this requirement in view, what ways and means has the senior student for the selection of a hospital internship satisfactory to his need? No hospital classed below A as a hospital can be considered a satisfactory place for an internship. In other words, no hospital in which patients do not receive excellent professional and institutional service is acceptable for an internship. The educational internship should be limited to class A hospitals, using the classification of the American Medical Association as a basis of grouping; this serves as a reasonably satisfactory index of a satisfactory care of patients, but it must be recognized that classification as an A hospital in itself does not indicate that the hospital is satisfactory for an internship. As it is the educational value of the hospital that is the important criterion to the prospective intern, certain general conditions must be fulfilled. In the hospital, the intern should expect to learn how to apply to the individual patient the more theoretical knowledge acquired in the medical school and by repetition, with methods of check as to accuracy, perfect himself in the methods of his profession, the methods of both diagnosis



and treatment, along with the acquirement of that somewhat intangible but no less important art, which, for a better term, we may call the understanding of the human relationships of patients. There must be in the hospital patients in sufficient numbers to keep the intern occupied, and yet not so many that he has insufficient time to study each one with care. The diseases of the patients must be sufficiently varied to give the opportunity to apply a major portion of the usual methods of diagnosis and treatment. The apparatus, including an adequate laboratory equipment to carry out these methods, must be available for the use of the intern. The range of diseases of patients needed is rather more difficult to express in any definite or numerical way. A general medical service of the size already indicated, to which patients are admitted so as to include those likely later to need surgical therapeutics, will furnish an adequate range of diseases. A surgical service in which all the usual procedures of diagnosis are carried out will provide this range equally well. Just how far there is need in such an internship for the special services, such as pediatrics or obstetrics, is a question of considerable debate at present. Its proper answer must hinge on what is to be the future work of the medical student and what are the opportunities within the medical school for practical work in these several branches. An internship as short as twelve months probably is inadequate in time unless it is an unmixed service in medicine for the man proposing to go ahead with a special service; any form of mixed service should be eighteen months in length as a minimum and longer if it includes any of the very special services. The number of necropsies obtained on patients dying in the hospital is perhaps the best single index of the professional efficiency of the hospital, of the amount of work devoted to the study of patients by members of the staff, of the eagerness of the staff to learn, and its teaching abilities. Christian gives 25 percent of fatal cases coming to necropsy as a criterion of desirability of a hospital for an internship.

#### PHYSICAL FITNESS IN COLLEGE

Of 645 men entering Dartmouth College in the fall of 1925, 3 percent were obese (20 percent or more above average weight); 25 percent were underweight, but less than 7 percent; (7 percent or more under average weight for height); 30 percent were seriously underweight; 42 percent were within the range of the safety weight zone. The basis of comparison is the gain made by an average 16 year old boy—the last year of rapid gain—an annual rate of 8 pounds (3.6 Kg.). William R. P. Emerson, Boston (*Journal A. M. A.*, May 15, 1926), states that eighty-nine men who were in physical fitness classes gained an average of twelve and one-half times as much as did 427 men not in classes in a longer period of time. Fifty underweight men in physical fitness classes gained four times as much as did fifty underweight men not in classes. The former group gained 150 percent of the gain in height made by the latter group. Twelve men in the first nine weeks of class work made 477 percent of the gain they had made in the nine weeks before entering on the physical fitness program. Ninety-one men reporting in April gained, by the time they entered college in September, 759 1/2 pounds (344 Kg.). This amounts to 36 percent of the actual deficit of the group reported. The underweight men average about six physical defects each—a range of from two to ten. About half of these were due to nasopharyngeal obstructions and about one-

fourth were defects of posture. From a third to a half of the men had already been operated on for the removal of diseased adenoids and tonsils. In one group 84 percent were recommended to have expert nose and throat examinations—48 percent received negative reports and 36 percent were advised to have throat operations. The chief difficulties, in the order of their effect on weight, were: (a) grouped examinations; (b) "chinning" season, carnival and vacations; (c) competition in athletics and other extracurricular activities. For the entire freshman year of the class of 1927 at Dartmouth, the obese group showed the lowest percentage of illness from nasopharyngeal causes; the underweight students had twice as much nasopharyngeal illness as the optimal group. About 40 percent of the students were absent for illness during the year, losing about five and one-third days for each man ill and about two days for the whole class. In the class of 1928, at Dartmouth, the underweight men not in physical fitness classes who lost weight during the college year averaged 0.6 less in college marks than did those who gained in weight in this time. For both semesters, the underweight men had twice as many grades of less than 1.0 as the average of all the members of the class, and three times as many as were found in the group ranging from average weight to 10 percent above the average. In the attainment of grades from 2.5 up, the underweight men were below the average, and the safety weight group ran above the average. The obese men, 20 percent or more above average, ran below average in high college marks and above the average in low marks. They showed twice as many low marks and less than a third as many marks of the higher grade as were found in the safety weight group. In a group of eight men "withdrawn" from college, seven deserved zero in "control" in the physical fitness classes. Their average "health intelligence quotient" was 43 on a scale of 100. Their average college grade was 0.8. Four of them were in the lowest decile group (10); two were in group 9; one was in 7, and one in 3. In the class of 1927, in the Massachusetts Institute of Technology, a comparison of grades received in college during the first term and those given by the nutrition worker showed that the ten best in college work had been ranked in the physical fitness class an average of 68 percent, while the ten lowest in college grades averaged 46 percent in the Dartmouth class. The highest seven in college grades made an average gain in weight of 359 percent; the second seven averaged 299 percent, and the lowest seven, 225 percent.

#### FUNCTION OF LIVER IN RELATION TO OPERATION ON GALLBLADDER AND DUCTS

G. W. Crile, Cleveland (*Journal A. M. A.*, July 31, 1926), and his associates have records of 1,682 operations on the gallbladder, including 786 in which drainage was done and 740 excisions of the gallbladder. On the whole, the end results in cases in which drainage was done have not been as satisfactory as the end results in the cases in which the gallbladder was excised. On the other hand, if the immediate mortality and end results of a series in which excision was done in every case regardless of age, physical state, general health, the presence of an acute infection, the existence of complicating diseases, obesity, high blood pressure, respiratory diseases, cardiorenal diseases, diabetes, etc., could be compared with the immediate mortality and end results of a similar series in which only drainage was done, the difference would not be marked. A cholecystectomy in every case, regardless of the local or the general condition, would inevitably show a higher immediate mortality but better end results than would follow drainage under the same conditions. It seems paradoxical, but it is a fact, that cholecystectomy is safest when the indication for it is least clear. Drainage is safer when the general hazard is most clearly



defined. It follows, therefore, that the surgeon must weigh every factor with meticulous accuracy. As for the technic of the cholecystectomy, that, like the choice of the operation itself, can be governed by no fixed rule, except that, in view of a fundamental conception of the importance of liver function, liver function must be conserved. This is accomplished directly by ample exposure, bloodless dissection, clear vision, minimum trauma, minimum anesthesia, optimum temperature; and indirectly by the conservation of the patient's resources as a whole. If the field is amply exposed, if the tissues are never blood stained, if the dissection is sharp, if every important structure, namely, the common duct, the cystic duct, the base of the gallbladder, the cystic artery, are clearly seen and are definitely identified, then it matters little how the gallbladder is removed, although in many instances the gallbladder is best removed from below upward, since the blood vessels may thus be secured earlier and a somewhat drier field maintained. When the excision of the gallbladder is made from above downward, hemorrhage is best controlled by compressing—not crushing—the base of the gallbladder, including the arteries, with curved forceps, care being taken to avoid the common and hepatic ducts. This approach from above downward is the easiest route to a clear exposure of the arteries and cystic duct, and if the field is handled carefully there is no possibility of injuring the common duct and hepatic vessels. Whichever direction is followed, as clear a dissection of every structure must be made as in an operation for hernia. No accident can happen if the following prime factors are assured: a wide opening through Moynihan's paramedian incision; relaxation of the abdominal walls by regional block; bloodless dissection, and wide exposure of the field by means of the Deaver retractors. By experimental researches in the biophysical laboratories of the Cleveland Clinic, it has been found that the introduction of heat within the abdomen causes an immediate rise not only in the temperature of the liver, but also in the temperature of the brain, the rise in the temperature of the brain occurring synchronously with the change in the temperature of the liver. It would follow from this observation that the application of heat to the liver should in a large part counteract the effect of operations on the liver and bile ducts. As a result of their interpretation of this experimental fact, Crile has been applying heat to the liver by means of diathermy, which is an ideal method of holding the temperature of the liver at a normal level. One plate of the diathermy apparatus is placed on the lower chest on one side and the other is brought opposite the dome of the liver. The current can thus be continually applied during the operation, and the temperature of the liver and the abdominal viscera can be maintained at or above the normal throughout the operation, regardless of the exposure of the intestines; moreover, the application of the diathermy current during the immediate postoperative hours is of great aid in carrying the patient through that critical period.

## TRUTH ABOUT MEDICINES

### NEW AND NONOFFICIAL REMEDIES

**BACILLUS ACIDOPHILUS CULTURE (B. A. CULTURE).**—A pure aqueous suspension of *Bacillus acidophilus*, marketed in vials containing about 120 cc. It contains not less than 100 million viable organisms (*B. acidophilus*) per cc. at the time of sale. (For a discussion of the actions and uses of bacillus acidophilus preparations, see New and Nonofficial Remedies, 1926, p. 211, "Lactic Acid-Producing Organisms and Preparations"). B. B. Culture Laboratory, Inc., Yonkers, N. Y.

**PSYLLIUM SEED.**—The seed of *Plantago Psyllium* and related species of Plantago. By virtue of its indigestibility and mucilaginous character, psyllium seed acts as a mild laxative.

**PSYLLIUM SEED-RICHARDS.**—A brand of psyllium seed—N. N. R. Richards Inc., Glenolden, Pa. (*Jour. A. M. A.*, Nov. 6, 1926, p. 1559).

**OVARIAN RESIDUE SOLUBLE EXTRACT—P. D. & Co.**—A solution of an extract of desiccated beef and hog ovaries, from which the corpora lutea have been removed, in physiological solution of sodium chloride, each cc. containing 0.04 Gm. of soluble extract. The actions and uses of ovary preparations are discussed in New and Nonofficial Remedies, 1926, p. 269. The product is marketed in 1 cc. ampules. Parke, Davis & Co., Detroit.

**PROTEIN EXTRACTS—MULFORD.**—For a discussion of the actions and uses, see "Allergic Protein Preparations" (New and Nonofficial Remedies, 1926, p. 36). In addition to the Protein Extracts-Mulford described in New and Nonofficial Remedies, 1926, p. 36, the following products, marketed in 5 cc. vials containing 500 "protein units" per cc. have been accepted: Butternut Protein Extract-Mulford; Cheese Protein Extract-Mulford; Cherry Protein Extract-Mulford; Coconut Protein Extract-Mulford; Crab Protein Extract-Mulford; Duck Feathers Protein Extract-Mulford; Garlic Protein Extract-Mulford; Ginger Protein Extract-Mulford; Goose Protein Extract-Mulford; Grape Protein Extract-Mulford; Grapefruit Protein Extract-Mulford; Haddock Protein Extract-Mulford; Halibut Protein Extract-Mulford; Herring Protein Extract-Mulford; Mustard Protein Extract-Mulford; Nutmeg Protein Extract-Mulford; Paprika Protein Extract-Mulford; Parsley Protein Extract-Mulford; Parsnip Protein Extract-Mulford; Peach Protein Extract-Mulford; Pear Protein Extract-Mulford; Pecan Protein Extract-Mulford; Pineapple Protein Extract-Mulford; Prune Protein Extract-Mulford; Raisin Protein Extract-Mulford; Shrimp Protein Extract-Mulford; Sole Protein Extract-Mulford; Tuna Fish Protein Extract-Mulford; Turnip Protein Extract-Mulford; Walnut (Black) Protein Extract-Mulford; also the following product marketed in 5 cc. vials containing 250 "protein units" per cc.; Duck Protein Extract-Mulford. H. K. Mulford Co., Philadelphia. (*Jour. A. M. A.*, Nov. 20, 1926, p. 1743).

### PROPAGANDA FOR REFORM

**PHOSPHATES AND FATIGUE.**—During the World War, astounding reports were circulated regarding the promotion of muscular activity and the prevention of fatigue in both man and animals through the administration of sodium phosphate. It was attempted, during the war, to increase the muscular efficiency of the German soldier by the oral administration of acid sodium phosphate in subluxative doses with alleged favorable results. Experiments conducted by the United State Public Health Service indicate that the ingestion of acid sodium phosphate does not increase muscular efficiency, but that there is a feeling of well-being experienced by many who ingest the salt. This probably depends on its stimulating action on the intestinal tract, and is due in part to increased elimination of alimentary waste. Acid sodium phosphate (sodium biphosphate) is more pleasant to take than other saline laxatives and is positive in its effects; those subjects who were constipated felt the beneficial effects of this laxative. (*Jour. A. M. A.*, Nov. 6, 1926, p. 1562).

**MORE MISBRANDED NOSTRUMS.**—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act. Gordon's Antiseptic (G. M. Gordon Drug Co.), consisting essentially of bismuth subgallate, magnesium oxide, charcoal, glycerin, water and a trace of carbolic acid. Bear's Emulsion (John D. Bear), consisting essentially of mineral oil, sodium phosphate, potassium phosphate, gum, alcohol and water. Milam (Perry Drug Co.), consisting of extracts of plant drugs, nitric acid, salicylic acid and water. Bull's Cough Syrup (A. C. Meyer & Co.), consisting essentially of ammonium chloride, extracts of plant drugs (including ipecac), alcohol, sugar and water. (*Jour. A. M. A.*, Nov. 6, 1926, p. 1577).



"ELFIN FAT REDUCING GUM DROPS" AND "SLEND'S FAT REDUCING GUM."—The quacks who prey on women who are overweight or who have convinced themselves that they are overweight, have done a thriving business in the past few years. Fortunes have been made in the sale of nostrums, most of which are utterly worthless, and a few of which are distinctly dangerous, sold for their alleged anti-fat properties. Elfin Fat Reducing Gum Drops, described as "The Chew and Grow Thin Treatment," are marketed by Pep-Giving Products Co., Inc., New York City. With the trade package come certain diet directions which alone, if followed, might result in a loss of weight. The A. M. A. Chemical Laboratory analyzed the preparation and reported that it was a "gum-drop" coated with varying amounts of a mixture containing essentially sucrose and phenolphthalein flavored with peppermint. The average amount of phenolphthalein was 1.4 grains to each "gum-drop." "Slends' Fat Reducing Chewing Gum" is put on the market either by Slends, Inc., or by Heath Products, Inc., New York City. It is claimed that the preparation contains absolutely no thyroid or any other harmful ingredient and that it can safely be given to children. At the same time it is admitted that the drug that is used in the product in extract of poke-root, while the trade package admits the presence of phenolphthalein. From its analysis, the A. M. A. Chemical Laboratory concluded that each piece of Slends is a piece of chewing gum (chicle) coated with varying amounts of a mixture containing essentially sucrose and phenolphthalein, flavored and containing a small amount of vegetable extractives. The average amount of phenolphthalein was 1 grain to each piece. From the analysis it appears that if extract of phytolacca is present, the amount is insignificant. While phytolacca has long been used in fake obesity cures, in almost every instance it is found to be present in such small quantities as to produce no physiologic effect whatever. (*Jour. A. M. A.*, Nov. 13, 1926, p. 1665).

SCARLET FEVER TOXIN.—Nicolle, Conseil and Durand, in Tunis, have recently described the development of scarlet fever in a person inoculated with the fourth subculture of a streptococcus isolated from the throat of a scarlet fever patient. This work is regarded by the investigators as confirmatory of the discovery by the Dicks that a specific streptococcus is the cause of scarlet fever. It emphasizes also the value of the later report of the Dicks of the intradermal injection of streptococcus toxin, the "Dick Test," as a means of determining susceptibility to scarlet fever. (*Jour. A. M. A.*, Nov. 20, 1926, p. 1746).

"PABST EXTRACT—THE 'BEST' TONIC" NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Pabst Extract, The "Best" Tonic, is claimed to be "pure extraction of malt, properly flavored and combined with hops and is preserved by no other means than pasteurization." The preparation is stated to contain alcohol, by volume, 3.70 percent, and 1.45 Gm. of hops are used for the preparation of 12 fluid ounces of "tonic." The Council found Pabst Extract—The "Best" Tonic—unacceptable for New and Nonofficial Remedies because (1) the name does not indicate the potent constituents—malt and hops—of the mixture; (2) the claim "The 'Best' Tonic" is not warranted; (3) the therapeutic claims are unwarranted, and (4) it is sold to the public with claims that tend to its indiscriminate and ill-advised use. (*Jour. A. M. A.*, Nov. 20, 1926, p. 1760).

HOYT'S PROTEIN CEREAL OMITTED FROM N. N. R.—Hoyt's Protein Cereal is a preparation of gluten in the form of flakes containing protein, 78 percent; fat, 1 percent, and starch, 4 percent, which is manufactured by the Pure Gluten Food Co. (New and Nonofficial Remedies, 1926). The Council on Pharmacy and Chemistry reports that objection was made to the claims made for this product in 1925. In June, 1926, the Council received a circular containing misleading and unwarranted

claims essentially similar to those to which objection had been made previously; therefore, the Council rescinded its acceptance of Hoyt's Protein Cereal and directed its omission from New and Nonofficial Remedies. (*Jour. A. M. A.*, Nov. 20, 1926, p. 1760).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: Nau's Dyspepsia Remedy (Frank Nau), consisting of a liquid composed essentially of extracts of plant drugs, including golden seal and licorice, glycerin, alcohol and water, and of tablets composed essentially of bismuth subnitrate, cane sugar, and milk sugar, flavored with ginger and peppermint oil. Angelus Beef, Iron and Wine (The Brunswick Drug Company of Los Angeles), composed of meat extract, iron salts, potassium bitartrate, sugar, alcohol and water. (*Jour. A. M. A.*, Nov. 20, 1926, p. 1761).

GOITER PROPHYLAXIS WHERE THE INCIDENCE OF GOITER IS LOW.—A recent survey of goiter in Connecticut by experts of the United States Public Health Service indicates that the situation there is one that, in the opinion of the government consultants, does not call for the institution of state-wide goiter prophylaxis through the use of iodized water supplies, iodized table salt, or wholesale distribution of tablets containing iodine. The surgeons of the United States Public Health Service believe that prophylactic measures should be carried out among girls between the ages of 11 and 16 years, under the direction of local health authorities, guided and assisted by the state department of health and the local medical practitioners. The prophylactic methods chosen appear to be immaterial provided there is skilled supervision, low dosage of iodine, regularity and economy of administration. (*Jour. A. M. A.*, Nov. 27, 1926, p. 1832).

FREE BREATH.—This is exploited by O. W. Dean Co., Inc., Benton Harbor, Mich., as "The World's Wonder Treatment for Asthma, Bronchitis, Hay Fever and Catarrh of the Mucous Membranes." The advertisements for this nostrum stress the fact that asthma sufferers can try "Free Breath without cost." Those who receive the sample are then importuned to order the "complete treatment"—price \$18. Practically every "patent medicine" sold for the alleged cure of asthma contains either potassium iodide, Fowler's solution, or both, and when analyzed in the A. M. A. Chemical Laboratory, the preparation was found to consist essentially of 7 Gm. of potassium iodide and 0.05 Gm. of arsenic trioxide in 100 cc. This is equivalent approximately to 21 grains of potassium iodide and 24 minims of solution of potassium arsenite per fluid ounce. (*Jour. A. M. A.*, Nov. 27, 1926, p. 1847).

## BOOK REVIEWS

NASAL ACCESSORY SINUSES. By Professor M. Hajek, translated and edited by Joseph D. Heitger, A.B.M.D., and French K. Hansel, M.D., M.S. Fifth edition, completely revised and enlarged. Two volumes. Cloth. Price, \$17.00. C. V. Mosby Company, St. Louis, 1926.

This is an English translation of the fifth edition of a work which very rightfully has been considered a classic. The original has lost nothing through translation. It is the most comprehensive as well as the most valuable work on the anatomy, pathology and treatment of the inflammatory diseases of the nasal accessory sinuses that ever has been published. The English translation now gives to the surgeons of all English-speaking nations a work that may be considered a classic in its rigid adherence to trustworthy and comprehensive detail in the discussion of practically every phase of nasal accessory sinus disease. Practically half of the first volume is devoted to a consideration of the anatomy of the sinuses, and it is abundantly illustrated and described in minute detail. The balance of the first volume is devoted to inflammation of the maxillary antrum, with a careful consideration of the etiology, symptoms, diagnosis and



treatment. The second volume is devoted entirely to inflammation of the other sinuses, or the frontal, ethmoidal labyrinth, sphenoid, and the combined inflammatory affections of the nasal accessory sinuses.

Of special interest is the discussion of the indications for the numerous current operative methods for the relief of inflammatory diseases of the nasal accessory sinuses, and the author has gone to a good deal of trouble to describe conservative methods as well as to suggest the major procedures, especially the radical operation for those cases in which such treatment is the only measure that offers encouragement. Throughout the entire discussion of the problems that confront the surgeon will be found the constructive suggestion that pathologic anatomy provides a definite means of solving complicated problems, and that in each and every case of disease in the nasal accessory sinuses an effort should be put forth to determine the cause, and if possible, remove it. One of the commendable features of the work is that the author is not one of the ultra-radical kind, but advocates conservatism as the first principles to be considered. Furthermore, he has not been selfish in taking all praise for himself but has given due credit to numerous workers in this interesting field of study, the quotations and opinions of others being expressed freely.

One of the things that has impressed us most has been the author's persistent efforts to encourage careful study of nasal accessory sinus diseases before arriving at a diagnosis, and, in connection with this, we are pleased to note that he recommends an analysis of all indications and manifestations before attempting diagnoses. For instance, in a discussion of roentgenography, a subject that has received considerable favorable consideration in this country, the author very appropriately says that no absolute reliability may be placed on the roentgen findings, and he bases this opinion upon such experiences as many of us have had, in which an empyema has been found upon operation when the roentgen picture was negative, and vice-versa. He calls attention to a significant fact that the findings in the roentgen ray picture may not particularly indicate a suppuration, but show principally a deficiency of the air content, and in general this holds true with all of the nasal accessory sinuses. The roentgen picture often is significant and is an aid, but never should be taken as a positive diagnostic factor unless accompanied by other manifestations, such, as pointed out by the author, as the discovery of fluid in the sinuses as a direct result of catheterization or probing. There are symptoms and manifestations also which should go along with this to complete the picture and establish a more or less definite diagnosis that can be considered as trustworthy. What is said concerning the roentgen picture and its unreliability is all the more true concerning transillumination, for the author says that he has noted through transillumination a complete opacity on one side without opacity on the other, without existing pathology, and in other cases with normal illumination a very intensive process with mucopurulent secretion was found upon operation. He explains this on the basis of asymmetry of bony structures; density of bone also may alter the appearance of the transillumination. The author then says that transillumination is a diagnostic aid which may support the diagnosis but does not establish it.

The various operative methods that have been advocated not only by the author but other well known rhinologists are described in detail and elucidated with suitable illustrations.

The two volumes form a very valuable addition to our knowledge of diseases of the nasal accessory sinuses, and no little credit should be given to the translators for the fidelity with which they have carried out their task. We are interested especially in this latter feature because a former Indiana rhinologist is the principal editor and translator of this American edition and he has done his work exceedingly well. That the entire work will receive favorable reception at the hands of rhinologists throughout the English-speaking world is a foregone conclusion.

CAVERNOUS SINUS THROMBOPHLEBITIS. By Wells P. Eagleton, M.D., Newark, N. J., Medical director, Newark Eye and Ear Infirmary, Newark, Chief of the Division of Head Surgery, Newark City Hospital, etc. Cloth. The Macmillan Company, New York, 1926.

This is an exceedingly interesting and instructive monograph of nearly two hundred pages in which the author, a well known head surgeon, gives a complete record of his personal experiences. The contribution is primarily the study of twenty-five personally observed cases of cavernous sinus thrombophlebitis, with twenty-one deaths, twelve autopsy reports, and four recoveries, three of the latter being verified by operative findings and the fourth being questionable though clinical evidence seemed to be sufficient to warrant a positive diagnosis that the cavernous sinus itself was involved. The cases are reviewed at length and especial emphasis is placed upon each and every diagnostic or operative error made and, as the author says, he does this because he has learned chiefly by his failures. He has stressed his failures so that all may profit by his experience. It is his opinion that a study of the cases will enable a diagnosis of thrombophlebitis of the cavernous sinus to be made early enough for rational surgery to be effectual in a certain proportion of cases. In this way many lives may be rescued from a condition which up to the present almost uniformly has terminated fatally.

Of particular interest right at this time is the author's opinion of the popular methods of attempts to sterilize the blood stream by the intravenous injection of bactericides like mercurochrome 220, gentian violet, acriflavine, etc. Commenting on this form of treatment the author says that he thinks it is fair to predict that when a remedy is discovered to sterilize the blood stream it will be found to be specific only for certain types of the microorganisms causing the blood stream infection, as quinine is for malaria and neosalvarsan is for syphilis, and he concludes with this significant statement: "Today none of the known chemotherapeutic agents,—mercurochrome, gentian violet, acriflavine,—penetrate into an experimentally produced edematous tissue in sufficient amount to be bactericidal, and clinically they all have failed when the site of the infection is in the coats of the veins—periphlebitis, or is a localized focus outside of the circulation—perisinous abscess, or even in freely moving blood when attacked by certain micro-organisms—viridans and pneumococcus."

An analysis of all of the cases reported in detail gives an excellent knowledge of blood stream infections and their course. In commenting on the various cases the author lays down some rules that he thinks experience justifies him in giving. Of particular importance is the necessity for careful and painstaking diagnosis and an analysis of all of the various systems that may be presented, not the least of which will be a careful blood examination and the findings of physical examination and record of temperature, pulse, reaction, etc.

Concerning operative treatment the author says that to meet with success the surgeon must be prepared to act on the early appearance of symptoms and he must act with faith in his own convictions instead of waiting for developments. His operative policy should be to combat pathologic conditions, and in this connection he should consider the type of infection, whether it is an acute infective gangrenous thrombo-phlebitis, a slow obliterating protective thrombo-phlebitis of which the latter holds out a fair chance of recovery by surgical intervention where the former offers little prospect of recovery. Then the operative attack must follow the route by which the infection entered the sinus. Finally, the disease must be attacked before the sinus is the actual site of a suppurating clot. The surgical indications are for the eradication of the original focus of infection by as free drainage as possible through the path of the original infection and to place the inflamed and thrombosed sinus at rest by ligation of the internal or common carotid artery of the affected side.

This little book with the frank expression of the



author's experiences given in detail, with pathologic and autopsy findings, is worth many chapters in a comprehensive textbook on the subject. The book ought to have wide appreciation among otologists.

#### PHYSIOLOGY AND BIOCHEMISTRY IN MODERN MEDICINE.

By J. J. R. Macleod, M.B., LL.D., D.Sc., F.R.S., professor of Physiology in the University of Toronto, Canada. Fifth edition. 291 illustrations, with 9 plates in color. Price, \$11.00. The C. V. Mosby Company, St. Louis, 1926.

The title is sufficient to indicate the scope of this book which is now in its fifth edition. Each edition has been revised carefully to bring it thoroughly up to date. The present edition is an expansion of former editions in order that it may be used as a textbook of physiology for students of medicine. It is a fair survey of the science of physiology as it stands today, with a discussion of its application to modern medicine. As the author well says, "The students of today are apt to be indifferent to an analysis of their cases from the functional standpoint, as they also are apt to be inadequately prepared in fundamental physiological knowledge to make an analysis possible. The student may have a superficial acquaintance with the main facts of physiological science but has failed to acquire the inquiring habit of mind which will enable him, through reflection, comparison, and personal research to apply the knowledge in practical medicine and surgery." It is to fill this want that the book has been written, and it well serves the purpose. The book may be termed an advanced textbook of physiology, though it is more than that in its attempt to point out the physiological interpretation of disease conditions. It is wonderfully well written, and its popularity as well as its value is attested by the fact that numerous editions have been required within the space of a few years. The subject matter is handled in ten parts as follows: 1. The Physicochemical Basis of Physiology; 2. The Blood and the Lymph; 3. The Neuromuscular System; 4. The Special Senses; 5. Circulation of the Blood; 6. Respiration; 7. Digestion; 8. Excretions of Urine; 9. Metabolism; 10. The Endocrine Organs, or Ductless Glands.

There are 291 illustrations to elucidate the text.

**A MANUAL OF PHYSICAL DIAGNOSIS.** By Austin Flint, M.D., LL.D., late professor of the Principles and Practice of Medicine and of Clinical Medicine in Bellevue Hospital Medical College, etc. Ninth edition, revised by Henry C. Thacher, M.S., M.D. Illustrated. Cloth. Price, \$3.00. Lea and Febiger, Philadelphia and New York, 1925.

This is one of the most valuable small books on physical diagnosis. It is now in the ninth edition. It emphasizes simplicity, directness, exactness, and skill in dealing with physical signs in health and disease. Special attention has been paid to inspection and palpation as well as to the more difficult methods of diagnosis, such as percussion and auscultation.

**THE PRACTICE OF MEDICINE.** By A. A. Stevens, M.D., professor of Applied Therapeutics in the University of Pennsylvania. Second edition, entirely reset. Octavo of 1174 pages. Cloth. Price, \$7.50. Philadelphia and London: W. B. Saunders Company, 1926.

This is an excellent, up-to-date work in which the various internal diseases are described in accordance with the present state of our knowledge, and in which is given the most necessary points, pathology, diagnosis and treatment. The author says that he has disregarded for the most part all controversial questions and all theories still under discussion. However, he does respect the conclusions which generally are accepted as final, even though more accurate observation and more critical consideration later may require a modification of views. A special effort has been made to bring the work thoroughly up to date and to make it a trustworthy guide to the practice of medicine for the student and practitioner of medicine.

**DISEASES OF THE SKIN.** By Richard L. Sutton, M.D., LL.D., F.R.S., Professor of Diseases of the Skin, University of Kansas School of Medicine, etc. 1147 illustrations, and 11 colored plates. Sixth edition, revised and enlarged. Cloth. Price, \$12.00. The C. V. Mosby Co., St. Louis, 1926.

We have had occasion to comment favorably upon earlier editions of this work. This sixth edition in reality is a complete revision of former editions so that it will be thoroughly up to date. The matter in former editions that has become obsolete has been weeded out, and much has been added concerning new ideas as to diagnosis and treatment of various cutaneous affections. Syphilis is considered from a practical standpoint, particular emphasis being laid upon diagnosis and the modern methods of treatment. The more recently discovered dermatoses are included for the first time. The author very freely gives credit to various publications from which he has drawn opinions, and throughout the entire work an effort has been put forth to treat the entire subject of dermatology in a comprehensive and at the same time concise manner. Credit is due the author for having used a very large number of fine illustrations in elucidating the text.

**FUNDAMENTALS OF DERMATOLOGY.** By Alfred Schalek, M.D., Professor of Dermatology and Syphilology, University of Nebraska College of Medicine, etc. Illustrated. Cloth. Price, \$3.00. Lea and Febiger, Philadelphia and London, 1926.

This little volume can well take the place of the larger and more comprehensive textbooks on dermatology. While it is intended for students it also will prove valuable to the general practitioner. It presents the fundamentals of dermatology in a concise and as thorough a manner as the limited scope permits. After describing the anatomy, physiology and general symptomatology of diseases of the skin, the diseases are considered alphabetically. As might be expected, the discussions are brief, but they are very much to the point. If we were to offer any criticism it would be that the discussions are too brief.

**PHYSIOTHERAPEUTIC LECTURES.** By H. G. Fischer and Company, Chicago.

This volume represents the proceedings of the fourth annual physiotherapeutic convention held at the Drake Hotel in Chicago in October, 1925, under the auspices of the H. G. Fischer Company, Inc. The papers and discussions covering the entire week of the convention make a volume of nearly 800 pages. As would be expected, most of those who appeared upon the program were physiotherapeutic enthusiasts, though much valuable information may be sifted from the material presented. Some of the speakers were, it seems to us, over-enthusiastic concerning the results obtained from physiotherapeutic methods, whereas others were more rational and conservative in their conclusions. Eventually physiotherapeutic treatment will be on a rational basis and we are pleased to note that the A. M. A. is making an effort to solve some of the problems that confront us. In the meantime, what has been presented at the convention in Chicago offers some wheat that may be selected from the chaff.

**PRINCIPLES AND PRACTICE OF CHEMOTHERAPY.** With special reference to the Specific and General Treatment of Syphilis. By John A. Kolmer, M.D., Dr. P. H., Professor of Pathology and Bacteriology in the Graduate School of Medicine, University of Pennsylvania. 1106 pages with 82 illustrations. Cloth. Price, \$12.00. Philadelphia and London: W. B. Saunders Company, 1926.

In reality this book is largely an elaboration of the subject of chemotherapy as presented in the author's book on "Infection, Immunity and Specific Therapy," which is now in its third edition. In the present work of some



1100 pages, about 700 pages are devoted to a comprehensive discussion of the subject of chemotherapy as it applies to the treatment of syphilis. However, the author also considers the subject of chemotherapy as employed in the treatment of local as well as systemic infections, and accordingly the book has a broad field of application and usefulness. If the author had done nothing else than consider the subject of syphilis, which is of such practical importance to the physician, whether he practices his specialty or is a general practitioner of medicine, he would have satisfied a real demand which his extensive laboratory and clinical experience enables him to handle in a perfectly trustworthy way, for chemotherapy is commanding a large share of attention and efforts in medical research and such a volume is of service both to the investigator and to the practicing physician. The subject necessarily touches upon every specialty in the practice of medicine and surgery, not only because it concerns the treatment of infectious diseases in general, but syphilis in particular to which every organ and tissue of the human body is vulnerable. The author has considered the treatment of syphilis in detail, and especially the methods of treatment in the different stages of syphilis based upon laboratory and clinical observation. Routine methods for the treatment of syphilis are neither possible nor variable, yet it is far better to have methods subject to variation to meet individual conditions than to have no methods at all. The laboratory and clinical experience of the author therefore fits him to discuss the subject in an authoritative way. This book ought to receive the same cordial reception that has met other books by the same author, and readers will find much of interest in receiving at first hand the now well-known Kolmer complement fixation reaction.

**OPHTHALMIC NEURO-MYOLOGY.** By G. C. Savage, M.D., LL.D., Professor of Ophthalmology, Medical Department of Vanderbilt University from 1886 to 1911, etc. 39 plates and 12 illustrative figures. Second edition. Cloth. Price, \$3.00. Published by the author, 167 Eighth Ave., North, Nashville, Tennessee, 1926.

This is the second edition of Dr. Savage's well known book on the normal and abnormal actions of the ocular muscles. Dr. Savage's theory is that every eye muscle has its brain center, and that when there is any form of heterophoria, one or more of these centers must be ever active during all working hours. These centers do not cause heterophoria but they stand ready to correct it. The author gives his methods of detection and treatment of heterophoric conditions. The text is elucidated by many diagrams and illustrations.

**THE THYROID GLAND.** By Charles H. Mayo, M.D. and Henry W. Plummer, M.D., Beaumont Foundation Annual Lecture Course IV. 1925. Cloth. Price, \$1.75. Published April, 1926, by C. V. Mosby Company, St. Louis.

This is a Beaumont Foundation Lecture delivered before the Wayne County Medical Society at Detroit, Michigan. Concerning it we can do no better than quote the preface by the committee which says that "This is an authoritative resume' of thyroid disease from one of the greatest American medical centers, and contributed by master students of the subject who have had unexcelled opportunities for investigation of all of its interesting phases. The Mayo Clinic has been favored in having the largest group of thyroid cases ever assembled during a period of thirty-three years. This group, numbering 22,728 cases, required 30,628 operations. The medical and surgical studies of such a large group of material carried on through so many years must appeal to all to vouchsafe the most authoritative pronouncement upon the subject ever given."

**PSYCHOANALYSIS AND BEYOND PSYCHOANALYSIS.** By Leonard L. Landis, M.D. Published by the American Association of Independent Physicians, 1926.

This book contains a lot of psychoanalysis bunk, and the author admits that he has presented it in the hope of establishing the truth in the mind of the lay reader. Anyway, we haven't the time nor inclination to review such drivel, and if anyone wants the book he may have it by calling for it.

**EARS AND THE MAN.** Studies in Social Work for the Deafened. By Annetta W. Peck, Estelle E. Samuelson and Ann Lehman. With introduction by Wendell C. Phillips, M.D., president-elect of the American Medical Association. Cloth. Price, \$2.00. F. A. Davis Company, Publishers, Philadelphia, 1926.

This book has been written by three prominent members of the New York League for the Hard of Hearing. We understand that the authors themselves are deaf, and consequently that accounts for the definiteness and emphasis with which they speak upon many of the subjects that are embraced in the book. What the authors are attempting to do is to emphasize the need of preparing to carry on under a physical handicap.

**HYGIENE AND SANITATION.** By Seneca Egbert, A.M., M.D., Dr. P.H., Professor of Hygiene, University of Pennsylvania, etc. Eighth edition, enlarged and thoroughly revised. 154 engravings and 4 plates. Cloth. Price, \$4.00. Lea and Febiger, Philadelphia and New York, 1926.

This book represents the eighth edition of a wonderfully interesting and instructive work on hygiene and sanitation, applicable to the individual as well as to the community. It is a book for the welfare of humanity, and its perusal by anyone cannot help but add to any efforts to improve individual or community health and happiness. Among subjects discussed are the following: Bacteriology and Parasitology, The Transmission of Disease, Immunity, Air, Water, Food, Stimulants and Beverages, Ventilation and Heating, Personal Hygiene, School Hygiene, Disinfection, Quarantine, The Removal and Disposal of Sewerage, Industrial Hygiene and Occupational Diseases, Tourists' Vacation Hygiene, Camp Sanitation, Vital Statistics and a final chapter on the examination of air, water and food. All of these subjects are discussed in an instructive manner, and each chapter is full of practical ideas having to do with the preservation, promotion and improvement of health and the prevention of disease.

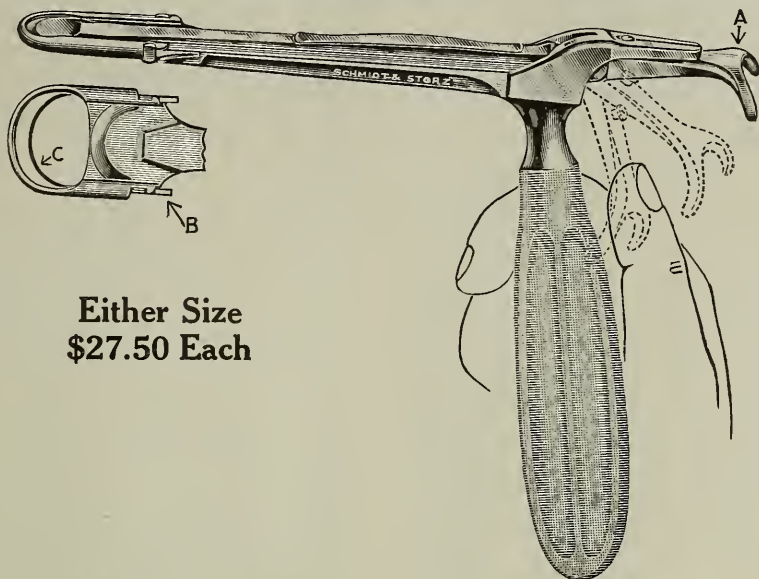
**CANNULA IMPLANTS, AND REVIEW OF IMPLANTATION TECHNIQS IN ESTHETIC SURGERY.** By Charles Conrad Miller, M.D., Cloth. Price, \$2.00. Published by the Oak Park Press, Chicago, 1926.

The author of this book is given as Charles Conrad Miller, M.D., but place of residence and connections, if any, are not given. The A. M. A. directory does not credit the author as being the member of any medical society. However, the author has made a bold attempt to write and put on the market two or three books pertaining to various phases of nose and throat surgery, of which this latest one seems to be in a measure a compilation from some of the earlier books. In reality, it is a plea for the use of insoluble gutta percha as an implant material. In our opinion the report concerning experiments, and the conclusions drawn as based upon reported personal experiences, should be proved by something more than the author's bare statement. Perhaps a significant statement at the conclusion of the book may be quoted as indicating our opinion. "For the present, patients should be told that these methods are not as yet recognized as established surgical procedures."

**PRACTICE OF PHYSIOTHERAPY.** By C. M. Sampson, M.D., formerly of the Physiotherapy Service, Walter Reed U. S. Army General Hospital, Washington, D. C., etc. 146 illustrations. Cloth. Price, \$10.00. C. V. Mosby Company, St. Louis, 1926.

Physiotherapy is popular, in fact too popular for its  
(Continued on Advertising Page xx)

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### MOLT AND STORZ MODIFICATION OF THE TONSIL GUILLOTINE Dr. Wm. F. Molt, Indianapolis

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## BOOK REVIEWS

(Continued from Page 46)

own good. It has been recommended for every ill to which flesh is heir, and it has been heralded as a cure-all by the conscienceless manufacturers and others who exploit for gain. It is bad enough when manufacturers delude and swindle, but it is far worse when members of the medical profession will misrepresent, delude and swindle, as they no doubt do when they become blind enthusiasts of a form of therapeutics that really has merit in certain conditions and ought to be adopted by the medical profession more generally than has been done in the past. Fortunately, this book has been written by one who has had wide experience in using physiotherapy, and he not only talks with emphasis but in a manner that indicates that he truly desires to place physiotherapy on a scientific basis. In part one he discusses physics and technic, including a description of all of the various modalities; in part two the clinical application; and in part three general consideration. The opinions expressed may be considered by some as coming from one who is unduly opinionated, and yet careful analysis of the subject matter indicates that the author probably is justified by experience in being optimistic on the whole concerning the value of physiotherapy, though he does not hesitate to say that it is not the cure-all that some would have us believe nor should it be commercialized to the extent that it is by many.

GENERAL INDEX VOLUME OF THE COLLECTED PAPERS OF THE MAYO CLINIC AND THE MAYO FOUNDATION, 1884 to 1925 inclusive. Octavo volume of 227 pages. Cloth. Price, \$5.00 net. Philadelphia and London: W. B. Saunders Company.

This is a very valuable volume to all those who are interested in the publications which have emanated from the Mayo Clinic.

INTERNATIONAL CLINICS. Volume III. Thirty-sixth series. September, 1926. Philadelphia and London: J. B. Lippincott and Company.

This publication has been a popular one for many years and during 1926 this popularity has been rightfully earned. In the volume under review there is a travel section which presents medical conditions as they now exist in Italy. There is also a biographical sketch of the Right Hon. Sir Clifford Allbutt. The surgical section deals with thoracic conditions. The section on diagnosis and treatment and the one on neurology, psychiatry and psychology meet the usual standard of the International Clinics.

THE SURGICAL CLINICS OF NORTH AMERICA (issued serially, one number every other month). Volume VI, Number III (Chicago Clinic Number, August, 1926). 324 pages with 101 illustrations, and Volume VI, Number IV (Mayo Clinic Number, October, 1926). 274 pages with 91 illustrations. Per Clinic Year (February, 1926, to December, 1926): Paper, \$12.00; Cloth, \$16.00 net. Philadelphia and London: W. B. Saunders Company.

The Surgical Clinics of North America have become standard reading matter for those of us who are at all interested in the subject of surgery.

The Chicago Clinic number is, of course, a good one. Arthur Dean Beavan presents some interesting gastric cases and also discusses carcinoma of the colon. Allen B. Kanavel and Sumner L. Koch discuss the pre-operative and postoperative care of patients and, although the lecture contains nothing that is new, it should certainly be studied by internes.

The Mayos, Judd, Balfour, Sistrunk, Henderson and Masson are among the contributors to the Mayo Clinic number. Naturally, this is a highly valuable clinical volume.

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NUMBER 2

### ORIGINAL ARTICLES

#### PROSPECTS OF THE PROSTATIC\*

ALEXANDER RANDALL, M.D.  
PHILADELPHIA, PA.

There are many phases of prostatic surgery that continue to be perennially interesting so that I feel that an apology is not necessary for bringing this subject before you. Unlike some surgical problems, its recognition does demand surgical interference and as yet we know of no preventative, or even palliative treatment worthy of advocacy. Again it is somewhat in a class to itself in that it is now rarely necessary, in fact it is ill-advised, to perform an imperative operation, and the surgeon will (if he be wise) reconstruct his weakened patient before considering operation and be able to choose both the time and the place to undertake the fight for life, ideals for which every strategist, whether military or surgical, works.

The care of the patient and his surgery has changed in the memory of everyone present in these latter respects and it is a survey of the past with a resumé of the present, and a look into the future, that I hope to present to you this day. I often like to present the past of the subject to my students in decades of progress, for if we go back to 1895, prostatectomy in the true sense of the word, as we now understand it, did not exist. But while Ramm and White were advising castration, Paget, Sir Henry Thompson and Hunter McGuire were creating permanent suprapubic fistulae, and McGill, Belfield, Fuller, Alexander, Bryson, Proust, et al, were laying the actual foundations of the future surgery, while at the same time, hundreds of sufferers were traveling the world dependent upon the catheters in their pockets.

From 1895 to 1905 true prostatectomies were performed, i.e., total and complete removal of hypertrophied lobes, and the decade closes with the historic controversy as to the preference for the suprapubic or the perineal approach: a controversy that waxed warm in many surgical meetings and the medical journals published extensive correspondence back and forth between propa-

gandists. It is probable that Young and his perfection of the perineal operation carried off the palm in the general medical and lay mind, for when he presented a series of 128 unselected and consecutive cases without a death, those who believed, marvelled, and the vast majority (who simply could not believe) concluded that there was another Munchausen born. This decade closes with both operative procedures well founded as to technique but as yet the majority of the operations performed as emergency procedures. The years 1905 to 1915 brought marvelous progress in the understanding of this problem of urinary obstruction. Again it was Young's teaching that showed that pre-operative preparation meant everything in obtaining a short convalescence devoid of complications, and long before we actually knew why, we recognized the distinct advantage of a forced water diet and high urine elimination, though to a great many the results were still attributed to the operative method, rather than to the pre-operative preparation. I truly believe that a day in preparation when needed is worth four days shortening of the convalescent period. Of course, today we measure this improvement and chart it in curves of urea nitrogen retention in the blood, and phenolsulphonephthalein elimination in the urine, but it is of interest to record that clinical skill and observation had taught the necessity and outlined the method before the laboratory tests developed to measure the results. This decade, ending in 1915, saw the bitter controversy between the suprapubic and perineal advocates come to its head and then gradually subside as each realized that preparation counted far more than operative method or technic, and I like to think that it was in this branch of surgery, probably more than in any other, that we all came out from under the dogma of the necessity of speed in operating, that was so thoroughly inculcated into the profession by pre-anesthetic surgery of half a century before. Think of the lithotomist Callot who rarely took over one minute to do a perineal section and and calculus removal, and Cheselden who was timed once to remove a calculus the size of a pigeon's egg in twenty-four seconds. We still admire skill and dexterity, and I trust ever will, but prostatic surgery no longer demands speed and it has taken a quarter of a century to realize that it alone does not save life in these elderly

\*Presented before the Section on Surgery of the Indiana State Medical Association at the West Baden session, September, 1926.



patients. This decade closes in 1915 with mortality statistics falling to a remarkably low level in the hands of the urologic surgeons. Ten years before it was a subject little spoken of and a mortality of twenty-five percent was possibly a generous figure. Whiteside, in the year 1915, disturbed the equilibrium of the surgical world by quoting the mortality results of 603 cases in the hands of general surgeons and compared these with 820 cases in the hands of urologists, and where the latter had a mortality rate of three percent, the former showed twenty-six percent. This, I feel, at this day's retrospect, was entirely due to the fact that the urologist prepared his patient while the general surgeon was still prone to treat urinary retention as an emergency operation.

The third decade just ended (1915-1925) has been a most salutary time from our point of view and though it brings with it no brilliant new developments in diagnosis and therapy, it records an enlarging circle of excellent clinics wonderfully equipped as to laboratories, x-ray co-operation and armamentarium, where splendid modern urologic surgery is being performed. Our mortality figures fall, I believe, to an irreducible minimum and while some have been fortunate to be able to report a mortality of three percent, or less, in series of 100 cases or more, speaking "by and large" in urologic hands, eight percent to ten percent probably covers the country's work. Here let me interpolate a point for consideration. A surgeon's figures must, and do, vary with his material, and where some surgeons with a clientele practically limited to private patients presents remarkably low mortalities, others of us, (and especially those working in large municipal hospitals), who are called upon to care for patients in far less fortunate circumstances,—physically, financially, surgically and recuperatively,—cannot equal such figures, and while my own mortality is high, knowing my material, as well as that of others, I do not feel particularly ashamed. Keyes recently brought this out in startling figures, for where private patients in one hospital receiving every care had a most commendable mortality rate, those in Bellevue, "the dregs of the populace" presented a rate over three times that of the former. One thing that this decade really developed towards improving the work on prostatic obstruction was the general recognition that every patient with symptoms of prostatism (frequency, urgency, difficulty, small stream, and residual urine) have not a priori prostatic hypertrophy. As this is part of my true theme which I wish especially to present to you, let us understand this point. The different conditions that give the same clinical picture of prostatism are:

(1) Prostatic cancer, long recognized (I recently found in an old church record in Philadelphia the following: "June 15, 1822. Christian Hanke, age seventy-six, died of schirrus of the prostate gland.") presents such a characteristic picture when felt by rectum or on instrumentation, that I mention it first. (2) The true hypertro-

phies: benign enlargements, which though constituting a class to themselves, nevertheless are themselves to be subdivided into separate groups according to the manner in which the prostate hypertrophies, and according to which of its lobes undergoes hypertrophic growth, a second point I wish especially to bring to your attention later on. (3) That interesting group which has traveled under so many different names that great confusion has been caused. The Germans used to speak and write of urinary obstruction in "prostatic atrophy." The French spoke of "prostatisme sans prostate." Our elder surgeons spoke of the "small fibrous prostate" and wasted much energy (and profanity) in attempting enucleation. Then Chetwood wrote of "contracture of the vesical neck," others called the condition "fibrosis of the vesical sphincter" and Young bringing back the term used by Mercier, though really originated by Guthrie, developed new instruments for the urethral excision of "median bars." Take your choice of this assortment. They all are speaking of identically the same pathological change and personally I adhere to the latter term in deference to Guthrie who, just short of a century ago, so accurately and picturesquely first described the clinical picture and post-mortem findings. (4) The "spinal cord bladder" must be included, where retention is not due to obstruction at all, but to vesical paralysis.

The real importance of an accurate appreciation of these four different pathological processes does not rest in their differing microscopic pathology, but essentially in their clinical recognition, for their surgical handling calls for entirely different modes of treatment, and success follows the man who reads their clinical pre-operative pictures correctly, while failure lurks for the superficial diagnostician, or the one who expects 100 percent results by putting all cases of urinary retention through his one favorite operative method.

Now we are entering upon a fourth decade: what may we anticipate for it? What prospects may the prostatic of today expect?

Up until now the fight has been as outlined. First, perfection of operative methods. Second, advances in clinical and laboratory study with marked improvements in the pre- and post-operative care. Third, an appreciation of the gross morbid pathology and a perfection of operative handling to suit the individual case. While fourth, through the entire past there has been a consistent and permanent reduction in the operative mortality to a point where we can hardly expect a further reduction. But, does our duty as surgeons rest solely in getting a living patient out of our operating room and hospital, and how often in an ultimate analysis of late post-operative results is there a post-operative morbidity that leaves a man living, but sometimes wishing he were dead—suffering from persistent urinary fistulæ, recurrent incisional abscesses, recurrent epididymitis, urinary frequency,

dysuria, persistent cystitis, irretractable pyelitis, incontinence, and so forth? Has anyone presented a study of post-operative results three or five years after his prostatectomies? I do not know of it, and I have a suspicious feeling that if made, it would be highly illuminating and probably a little embarrassing, and would jar us out of our present self-complacency. Therefore, I trust that the coming decade shall be dedicated to chastening a post-operative morbidity, as the past decades have so marvelously reduced our operative mortality. With this end in view, let me travel with you over some of the finer points that I feel will lend to improvement along these lines. First, let us examine the gross pathological changes in hypertrophy and in median bar cases, for I wish to confine my remarks to the benign obstructions, feeling that prostatic cancer is perhaps in a class to itself, or at least its control awaits developments along lines of cancer study as met elsewhere in surgery.

#### PATHOLOGY

I cannot but feel that a great many have thought that in hypertrophy the prostate enlarges, and in so doing, follows a more or less definite character of growth. That the reverse is true has been borne home to me in following a long series of autopsies (now over 1,200) and during this investigation to repeatedly find types of hypertrophy markedly differing from previously studied cases. Ultimately, the types grouped themselves into four basic varieties of hypertrophy and subsequent observations, as well as clinical cases, have been easily classified into one or the other of these four varieties of hypertrophic enlargement. That surgical attack should vary with the type of hypertrophy present I hope to show you, so a moment spent in outlining these points becomes essentially apropos.

Embryologically, the prostate arises from five separate groups of glandular acini:

1. The anterior lobe
2. The posterior lobe

(I mention these foremost to eliminate them as they so seldom play any part in benign enlargement of the prostate).

3. The right and
4. The left lateral lobe
5. The subcervical gland acini often called Albarran's glands

The simplest form of enlargement is that wherein the right and left lateral lobes alone undergo hypertrophy. In so doing, room must be acquired by and for growth, and for anatomical reasons this can be in but one direction, i.e., upward. So when we consider an hypertrophy to have gone to the point of maximum capsular tension, something must give way to allow of further enlargement. The most frequent result is dilatation of the internal sphincter and a herniation of the enlarging lobes up through the sphincter's ring (or vesical orifice) and a protrusion into the bladder. This, in fact, is the most frequent type of benign

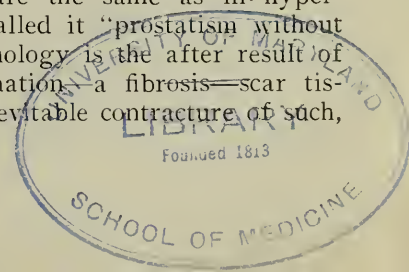
prostatic hypertrophy, as it is likewise the most urgent reason for the suprapubic approach as I will show you in a moment. Let us call this Type I., or the *intra-vesical hypertrophy*.

In some cases, however, the internal sphincter for unknown reasons refuses to dilate and remains tonically contracted. Again room is demanded by the enlarging lateral lobes, and as the only free space devoid of anatomical fixation is, as mentioned, in the upward direction, the hypertrophy goes that way but only by lifting the entire bladder above it. There is no intra-vesical protrusion of the lateral lobes, no dilatation of the internal sphincter, just an enlarged prostate, the seat of hypertrophic proliferation but entirely within its true and false capsule, an enormously elongated urethra but a tonically closed internal sphincter. Let us call this Type II., or the *extra-vesical hypertrophy*, and in so appreciating its variety consider it the ideal for perineal prostatectomy.

In the third variety, hypertrophy is essentially limited to that group of gland acini called the subcervical glands or the glands of Albarran. These lie in the midline on the floor of the urethra just distal to the vesical lip (subcervical) and hold three peculiarities, (1) that they are extracapsular and covered by urethral mucous membrane only, and (2) that they early cause sphincteric dilatation, and (3) that they are uniformly pedunculated. Some have claimed that in hypertrophy of the prostate they never fail to share in the growth. Whether or not this be true, I feel a greater truth, (and one that has not been sufficiently accentuated), would be the recognition that this group of gland acini are frequently the solitary seat of hypertrophic changes. Where such hypertrophy occurs, growth is always upward through the internal sphincter and intravesical. They form the true surgical middle lobes and are uniformly pedunculated. Let us group them as Type III., or *solitary middle lobe hypertrophy*, and credit them to the suprapubic operation.

Our fourth variety is simple. It is the *tri-lobar hypertrophy* where enlargement is present in both lateral lobes and the above described middle lobe. It occurs only in a conjugation of Types I. and III., and never in cases typical of Type II., for as above stated, sphincteric dilatation is a rule without exception in middle lobe hypertrophy.

Having so classified and grouped the hypertrophies into these four types, let us pass to the recognition of what is meant by median bars. In its pure state it is the antithesis of hypertrophy so much so that the Germans used to speak of it as prostatic atrophy and because the symptoms of bladder obstruction are the same as in hypertrophy, the French called it "prostatism without a prostate." Its pathology is the after result of longstanding inflammation—a fibrosis—scar tissue—and from the inevitable contraction of such,





stenosis of the vesical outlet occurs, with the concomitant symptoms of prostatism. This is the small fibrous prostate of the older surgeons, of which Dr. Mayo so graphically spoke when he said: "Those cases where the surgeon goes in, finds nothing, fiddles around, does nothing, removes nothing, backs out, and the patient gets well."

You can readily appreciate that an enucleation of such a prostate is an impossibility, for as you cannot enucleate a normal prostate until hypertrophy sets in and a false capsule is formed by the pressure on normal elements giving the characteristic line of cleavage, so also, (and even more so), you cannot enucleate the fibrotic prostate forming a median bar obstruction where scar tissue has added to the already dense musculoglandular structure. It is the place for the punch operation and the same is usually quite sufficient to accomplish the ends desired.

Of course there are mixed types of the above classification. I do not wish to befog the fundamentals by dealing with them, so we will leave them to the interest of the specialist, and pass on to the clinical handling of cases with bladder obstruction.

It is my contention that eighty-five out of every 100 prostatic hypertrophies can be safely and successfully handled by either the suprapubic or the perineal prostatectomy, but it is on the subsequent fifteen percent that our interest centers, (these figures are approximate), wherein the proper choice of operating will influence favorably or unfavorably the post-operative morbidity, and as shown in the lantern slides, this choice has a very definite anatomic reason. Hence, the time has come for the surgeon to prepare himself equally to perform either operative procedure and not to force a patient into the surgeon's favorite operative method just because some type of hypertrophy is present. Again, as regards the bar obstruction: their surgical handling is entirely different from the hypertrophies, for the simple reason that their obstructive character is based on an entirely different pathology. It is here that the urethroscopic median bar excisor, or punch instrument, finds its essential use. Nothing more is needed if the diagnosis is correct and I have never understood the point of view of subjecting a patient to a suprapubic cystotomy to be followed by a urethroscopic excision, nor even a perineal urethrotomy as an accessory approach for the removal of the small amount of tissue that is all that is necessary to cure these cases.

These distinctions are to be determined by cystoscopic examination before operation, and I am sure that when surgeons (urological and general) thoroughly appreciate these anatomicopathological facts and changes, that create these types of vesical obstructions, they will likewise see why these three operative procedures have been developed and likewise have, in the hands of their particular propagandist, given brilliant re-

sults. But in the final analysis each has had its equally brilliant failures where such enthusiasts have tried to fit all three types into their one operative method, and it is for this reason and for the accentuation of that certain group of post-operative morbidities that I firmly believe we all must come to the point of accurate pre-operative cystoscopic analysis and diagnosis, and place our patients into the operative procedure that their individual pathological change demands in order to reduce this factor of incomplete cure.

I have nothing new to advocate in pre-operative care—personally, I like to take time, plenty of it, and depend on the indwelling catheter for drainage, except in pernicious hemorrhage, vesical calculus, or intolerant patients. The blood urea nitrogen and the phenolsulphonephthalein test, I believe, are sufficient as renal tests. Three thousand cc. of water per diem is our therapy to improve renal function, helped, as cases demand, by digitalis. Likewise, daily blood pressure readings are most instructive and often stabilization of this one factor not only indicates to us the type of anesthesia to choose, but often tells us of the proper time to proceed with the prostatectomy where renal function remains low.

Following an analysis of the frequency of epididymitis in our cases and the finding of a twenty-three percent incidence has of late made us advocate bilateral vas section as a preventive measure, and the observation that five percent of these cases occurred prior to operation (during catheter drainage) indicates that it should be done before drainage is started. I can add nothing to the actual operative technique. Perineal prostatectomy follows Young's technique, at times with Hinman's modification in actual enucleation. Suprapubic prostatectomy is so standardized that I hardly know who is the father of the method I use, though Squier's intra-urethral enucleation and wound closure are the two most important steps and I feel safe with Hagner's bag for hemostasis, supported by Hamer's bracket.

The choice of anesthesia is a most important operative factor and here I must confess to a strong favoritism for spinal anesthesia, using the Babcock technique, and in suprapubic cases using it routinely unless a systolic blood pressure below 130 is present. When it is contraindicated, I prefer gas and ether to straight nitrous oxide and oxygen anesthesia. Sacral anesthesia and lower abdomen field block has been used in a few cases, but I truly dislike the time-consuming, nerve-straining effect on the patient's mental poise, and prefer to make the operative procedure a minor incidental in the hospitalization.

Post-operative steps are of the simplest. The perineal prostatectomy has drainage out in twenty-four hours and nothing but an external cleansing douching of the wound. No instruments or irrigation are necessary. The suprapubic is likewise handled with the minimum of instrumentation, though here I like, because of the

uphill drainage, a daily vesical lavage either per fistula, or per urethra. In either type of operation, a sound is passed at the end of the third week if normal healing seems at all delayed, for we expect fistula closure by the twenty-first day in both types of operation.

Briefly, let me analyze my last 100 cases of benign prostatic hypertrophy. There have been thirty-eight perineal prostatectomies and sixty-two suprapubic. The ages of perineal cases vary from forty-two to eighty years with an average of sixty-four years, while the suprapubic range from forty-five to eighty-five years and average sixty-seven years. In the perineal cases, one factor in convalescence and especially in postoperative comfort, is the fact that the majority of these patients have gained early control of their urine due to the saving and early functioning of their internal sphincter. This I consider a most definite proof of the value of this muscle and the necessity of its surgical conservation at the operating table, as likewise proof of the propriety of this operative approach in those cases which I have described and shown to you, where the internal sphincter has not been dilated. In this series of thirty-eight perineal prostatectomies, thirty-five percent of them had vesical control with voluntary urination on the second day, and the average for all was to have this bladder control on the fourth day. This is an advantage, that I know will appeal to you at once. Voiding per urethra for the first time following operation is always a step in advance and oftentimes a real novelty and tonic to these patients. In the perineal cases it averaged on the ninth day; in the suprapubic cases on the thirteenth day.

Fistula closure I always feel should occur on or about the end of the third week and find that the suprapubic cases averaged twenty-six days including three long delayed cases, who were triple cursed by age, small suburban hospitals, and poor vitality. They all lived—but without these the average drops to 21.2 days, which I feel is a much truer average. In the perineal cases, my total averaged thirty-seven days, but again this is distorted by three cases unduly long and a truer average would again be 19.6 days excluding the above, as they each had inexcusable technical errors.

I hesitate to mention mortality and am heartily ashamed of mine, but there are some extenuating circumstances and they are a straight current series of absolutely unselected cases, forty-two private patients and fifty-eight ward patients. In the perineal group occurred five deaths; one an insane man, demented in his seventy-third year, complete retention, requiring four men to hold him during catheterization; his fistula healed on his twenty-first day (in spite of sleeping with his fingers in his wound) and he died on his thirty-third day while awaiting a vacancy in an asylum. The second, a death on the eleventh post-operative day: the patient sat up in bed and fell back with

a gasp for breath and died immediately. The third was found dead in his bed on the thirty-seventh day, his fistula having healed two days before. He had twice been visited by the night nurse and thought to be sleeping—apparently he died as he slept without a struggle, and autopsy proved nothing. Fourth, a probable operative death—at least myocardial failure the day following operation, and the fifth a death on the twenty-sixth post-operative day from pyonephrosis—a septic case with many complications. Of these it is only fair to accept the last two as attributable to the operative procedure.

In the suprapubic group we find eight deaths. The first, death on the eleventh day from renal failure and persistent bleeding (this the last case in which I used a gauze pack as a hemostatic), he likewise had a very large vesical calculus; he had a two-stage operation with fifty-six days' preparation. The second death, the eighth day after healing of the fistula which closed on the eighteenth day, was caused by cardio-renal failure. The third had the largest prostate in the series (328 gms.); a septic and cardiac death on the twenty-fifth post-operative day—a two-stage prostatectomy. The fourth died in convulsion eight hours after operation: known to have suffered attacks of true angina. The fifth died from cardiac failure on the ninth day. The sixth—a two-stage case and very septic, died on the eighth day. The seventh, a frank operative death: a negro, suffering from urethral stricture, vesical calculus, huge prostatic hypertrophy, urgent vesical hemorrhage and complete retention with catheterization impossible; fifty-nine days of preliminary suprapubic drainage and special nursing, transfusions, hypodermoclysis, intravenous saline, plus special diet, etc., brought him to the operating room with his mind convinced he would die and as I unwisely chose spinal anesthesia, he became faint, then pulseless and though revived by intravenous saline, I feel sure we caused his death by over-stimulation and over-loading of his heart muscle. The last—again a two-stage case, with three weeks' preparatory drainage, a paralytic with senile dementia and aphasia; homeless, with complete retention, bleeding and catheterization impossible, he petered out on the seventeenth day post-operatively.

It is of interest that eight of these fatal cases were ward patients and five (really only two) were private cases, bearing out my previous statement as to the relation of mortality to material.

Truly the prostatic surgeon assumes surgical risks peculiar to his own, hardly equalled or paralleled in the other fields of surgery, and I love to share in any part of this problem, striving as all surgeons do, for a perfect score and the one hundredth cure; saving life to men who have fought many battles, often battling for others through their busy lives; surgical problems while not as acute or as overwhelming as appendicitis or perforated ulcer, are perhaps even more severe



in their slow torturing to an untimely, yet certain demise. How brilliant and how happy is the recovery, prompt healing under conditions of age and drainage, when one should least expect it, and watching the return of an intoxicated mind to its normal vivacity. So it may be said with equal truth that prostatic surgery has its splendid rewards.

#### DISCUSSION

H. G. HAMER (Indianapolis): I was very much pleased when Dr. Randall accepted my invitation to come to read a paper before the Surgical Section of the Indiana State Medical Association. I had nothing to do with the selection of his subject but I was pleased when he chose this subject, because I know the great work he has done along this line. His presentation of the subject has been very profitable to all of us whether we do urological surgery or not. He has covered the field very thoroughly, emphasizing the need for accurate diagnosis,—diagnosis as to the patient's general condition and particularly as to the type of obstruction to be dealt with. He has emphasized the need of proper preparation for and proper selection of the time for operation, guided by the means which we have at hand in measuring the man's fitness for operation. He has emphasized the fact that no pet operation is applicable to every case. All in all he has come to us with a straightforward presentation of the subject which will do us all a great deal of good.

I see in the audience Dr. Owsley Grant, professor of surgery of the University of Kentucky, and I should like to ask the privilege of the floor for him and an invitation from our section to discuss Dr. Randall's paper.

OWSLEY GRANT, (Louisville, Ky.): First of all, I am just coming back from the Kentucky state meeting and Dr. Dowden was kind enough to send me a program of your meeting. When I saw Dr. Randall's name nothing could prevent my coming. My enthusiasm in coming is only in a measure counterbalanced by the great benefit I have gained from this paper of Dr. Randall.

This is the type of thing urologists are struggling to do. Those of us not situated so favorably as Dr. Randall must look to him. It seems to me that in this type of study and in the study of pathologic specimens from the autopsy table by one who is constantly familiar with what goes on in the inside of the bladder, we are to arrive at what will be our fourth decade in the urologic field.

There is so little that I can say in regard to Dr. Randall's paper that I feel whatever I might say would lead to confusion. There are only one or two points I want to emphasize and one I want to ask Dr. Randall to discuss in his closing. Those of us who are situated in the outlying districts—Indiana is not so situated because Dr. Wishard and Dr. Hamer bring it into the central section, but in Kentucky urology has been poorly done because we have not the proper basis for it

to be carried on, as Dr. Randall has shown, and consequently we have seen a large number of men who have been away to be operated on. When Dr. Randall said that he would like to have a follow-up, I thought the very place to get it would be from us, for I see patients now who were operated on years ago. It is a pitiful thing to see these patients who have fistula and who leave the hospital apparently cured. We see a great many at home. I think the answer to it is that these cases have not been done according to properly devised methods as described by Dr. Randall that mean decrease in the morbidity. I think we can almost wipe out the mortality because we do the operation as best we can, under the physiologic condition of the patient. If you remember Dr. Randall's statistics, practically all the cases that died did so at a long period after operation so that they cannot in the true sense of the word be classified as deaths. You remember in the classification of deaths by the American College of Surgeons, they speak of deaths within twenty-four hours, within forty-eight hours and institutional deaths. None of these occurred within forty-eight hours, which means that the urologists are getting out these prostates without immediate danger and that we cannot expect to improve upon. The thing that is happening is something we do not understand in the preparation of these patients that can only be obviated by the medical as well as the surgical side at the time of operation. Dr. Randall did not say one thing that I am going to mention, and that is the relation of the one and two-stage prostatectomies. I think that is an interesting and somewhat mooted point. Granted that the patient is required to have a suprapubic prostatectomy, how many of them are fit to have the one and two-stage prostatectomies? He said in his conversation with me that those who can have a one-stage should have it. His preference is that of most of our clinics of the country, that the preference toward the one stage is growing. The answer to the problem is that they are much easier for the surgeon to do. If the patient is in fit condition that is the operation of choice. If the patient is not properly equipped with either a heart muscle or renal tissue to carry on, then the two-stage becomes the much safer procedure. We should not, in my opinion, operate on a prostatic that we do not expect to get well. These men are in a period of life when they have not a great many years to look forward to. These men who are destroyed with back pressure, with damage to the kidneys and heart have so little to look forward to that it seems almost unfair to ask the surgeon to attempt to do a prostatectomy with a large chance of not getting any benefit.

The punch operation I believe claims a larger field than this paper leads us to believe; at least, I would say that in our experience the punch operation has accomplished more in the larger type of prostate. For that reason we have found a large number of cases that we do not think are

suitable for enucleation of the prostate but which have been given temporary relief by the punch operation.

I think there is nothing more I could even suggest about Dr. Randall's paper. I must express my appreciation for the opportunity of being here. I just want to impress upon you again how much it means to us who attempt to do this thing in a mild way and with how much clearness he has brought out this differentiation, which is the basis of successful prostatic surgery.

M. E. KLINGER (Garrett): The doctor has not told us what he does with the cases he does not operate upon, or does he operate on all of them? I would like to have him tell us what he does with the cases that he does not operate upon. I think that is part of the prospect of the prostatic.

CHARLES STOLTZ (South Bend): This subject has been so elaborately presented and so lucidly put by this master of the situation, that there is nothing to add. Sometimes we bushers and backwoods surgeons have to do prostatectomy, and I am guilty of the offense. It used to be the most dreaded thing that I did but I have gotten now so that I just like to see the prostatics come in.

I am glad to hear from such evident good authority that there is after all at the present time some place for the one-stage operation in properly selected cases. While with the two-stage operations there has come a great advance in the general care of the patient, yet there are a great many prostatics who come in sufficiently good shape that they may be operated upon immediately and without so much fussing. Why eliminate surgical judgment anymore in this than in any other kind of surgical cases?

There is one thing which I think has added much to my success in prostatectomy; that is that I do no such thing as simple suprapubic or simple perineal operation. All my prostatics are operated by a combined or by what I choose to call bi-polar enucleation. My procedure is as follows: I first make a perineal incision large enough to admit my left index finger up to and into the prostatic capsule, then I proceed in the regular way to do a suprapubic operation. The left finger pushing up and enucleating as well as the right. A large tube is placed in the perineal wound and after a careful inspection of the bladder, the suprapubic wound is entirely closed and heals immediately just as any other cystotomy wound should. I have no authority for this technique and I do not know that anyone else is doing it. I may be committing a great surgical sin by departing so far from the current fashion at this day when everything is standardized and done by authority. I am always willing to take suggestions, but likewise I reserve the right to think for myself.

It was once said in this state meeting by a very eminent surgeon that perineal drainage is fallacious because it does not drain. Now, as a matter of fact, you can keep the tube entirely free

from clots and debris by inserting a catheter, with a small ear syringe attached, clear up into the bladder and irrigating as often as is necessary. I used to worry about how soon to take out this tube, leaving it in position usually for five or six days. Am glad to know that it can be taken out after only one day. But there again the individual operator's judgment must prevail.

BERNARD ERDMAN (Indianapolis): There can be no question of the quality of the paper. There can be no question of the honesty of the man who read the paper. Any man who has the courage to come before you and present a brilliant paper of this type is a man from whom we can learn much. Those of us who have done some prostatic surgery do not have any difficulty in remembering the wisecracks standing up in some of the societies and saying, "you cannot do a perineal prostatectomy," "you cannot do a suprapubic prostatectomy," but none of them ever told us why. This gentleman comes here and shows the indications for suprapubic and perineal prostatectomy. I might have the temerity to say to Dr. Stoltz that the trick that he speaks of was fathered by no less a man than the eminent surgeon, the late Dr. A. J. Ochsner. He wrote it up in the *North American Surgical Clinics*.

The statistics presented to us by Dr. Randall will bear a good deal of thought. You will recall that he had fifty-two ward cases and forty-eight private patients. You can see the difference in his material. Those of us who work in the Indianapolis City Hospital know what we have there. I should imagine that the type of ward material Dr. Randall has is even worse, made up of derelicts from all over, than we have at home. Private patients we can control. The patients we can control in a municipal hospital do get a great deal of care. Many times an individual in a municipal hospital will get just as much care and special nursing as a private patient, but the fundamental basis of this individual's physiology and pathology is bound to make a difference in your mortality. The man who has led a more or less easy physical life is the man who may have and usually does have a good deal more resistance than the fellow who has worked hard all his life under bad conditions and who has not had an opportunity to have preliminary care and rest.

Personally I may say that I am delighted to have the opportunity to hear this paper. I am sure that Dr. Randall will unquestionably be able to convince all urologists that the argument for suprapubic prostatectomy and the argument for perineal prostatectomy cannot be decided on upon individual preference, but upon basic pathology which must be determined by the individual surgeon who knows how to do a good cystoscopy.

F. S. CROCKETT (Lafayette): I feel like personally thanking Dr. Hamer for bringing Dr. Randall here. There has been in the past some dissatisfaction in this society when essays on prostatic subjects were presented, but I think that



has been on account of the quality of the papers read here in former years. The presentation of this particular type of paper reflecting as it does such an earnest endeavor, is one which carries conviction to all of us. In listening to Dr. Randall and wondering if there would not possibly be something to which I could take exception or something which he might have overlooked, I must confess that I could not find anything. I agree with him because of the absolute soundness of his position, which makes him an authority in this work and because it agrees with my own experience.

I believe, however, that the remarks of Dr. Stoltz might mean that he believes the one-stage prostatectomy has been advocated in Dr. Randall's paper as being applicable to more cases than we have in the immediate past been using it. I do not believe that Dr. Randall wishes to give that impression. I believe that he would emphasize that the patient must have attained or must be in a physical and physiologic state equal to that which we seek to accomplish through a first-stage operation in preparation for the second. It makes very little or no difference what you do as the first stage, whether you put in an indwelling catheter or whether you do it surgically. The point is to have functionally competent kidneys and a general physical state which will warrant surgery. I think this point should be emphasized in order to correct a possible misinterpretation of Dr. Randall's remarks.

W. S. EHRICH (Evansville): I would like to say a word of appreciation for this wonderful paper of Dr. Randall. I am glad that he selected the subject of prostatic obstruction because that is the one thing in which we, as men, should be interested. I wonder if any of you have ever thought that adenoma of the prostate is an affliction from which, through no fault of our own, we are all liable to suffer. We know so little of its causation and there is no known way to prevent it except by the method just told you by Dr. Erdman—dying before we are fifty.

As to the pathology that Dr. Randall has shown you, there is no question for discussion. The one thing that I liked especially about this paper was the lack of emphasis on the type of operation, which after all is a question of personal equation guided by the existing pathology, and the great amount of stress on the proper preparation of the patient. I believe if a case is properly prepared and well treated post-operatively it takes an awfully bad surgeon to kill a prostatic.

Regarding the operative cases, I would say that I have done urology long enough to have a fair retrospective view and as I look back over my cases I can say that any prostatic that was a surgical risk and was not operated upon, both the patient and I have lived to regret. If the patient is a bad risk he should be prepared with the intention of operating at the proper time. The man is

constantly growing older and his pathology is constantly increasing. Of course there are some cases that are inoperable but these are rare.

Sometimes there is difficulty in convincing a patient of the necessity of surgery. As long as the patient thinks that he has an enlargement of the gland he will refuse to have the gland taken out but when he is told the true pathology, that he has a tumor in the gland that treatment, prayer, or rubbing will not remove, but which must be handled as any other tumor, he will promptly submit to the necessary operation.

Concerning the punch, I am not entirely sold on this instrument except for the removal of constrictures at the vesical neck. I have seen this operation used on adenomata and think that the relief is very temporary. I much prefer and think it is much safer to do a suprapubic operation and if this is inadvisable to rely on dilatation with a Kollman instrument.

A. F. WEYERBACHER (Indianapolis): I have never heard a better paper. I derived a great deal of information and learned a great deal from it. I would like to hear Dr. Randall say something about these prostates we cannot do anything for.

WILLIAM E. TINNEY (Indianapolis): One thing Dr. Randall said that was particularly pleasing to me, as one of the younger workers in the field, was that these patients need to be carefully cystoscoped.

I read an article in the *American Journal of Urology*, by a man much older than myself and who has been in the field much longer, who rather belittled cystoscopic examinations before doing a prostatectomy. I could not see it that way and am glad that Dr. Randall called attention to the fact that a careful cystoscopic examination is a proper procedure before determining whether the operation is to be done by the suprapubic route or the perineal route. I am sure that a careful cystoscopy is an important feature of the work.

D. F. CAMERON (Fort Wayne): I want to compliment Dr. Randall on the tremendous amount of work he has done especially in classification of prostatic pathology. I was glad to hear him give his opinion of the technical determination of kidney function. I believe that too much importance is placed on just what percentage of phthalein, or just how much blood urea is present. So many times it has been said that if the phthalein was not up to twenty percent there was nothing to be done. Nothing will equal good clinical judgment as to the condition of the patient. A patient can be operated on with a phthalein below twenty or even fifteen percent.

In the deaths reported it is my experience that they are nearly always cardiac deaths. It has been stated that uremia was the most common cause of death. Most of the deaths are cardiac affairs or those associated with arteriosclerosis, but not so many from uremia and hemorrhage. I think in general, not only in urology, too much

attention is being paid to such percentages as the basal metabolism and the phthalein test. No one of those tests will take the place of good clinical judgment.

There is one question I would like to ask in closing, whether in those patients in whom you know you will do a suprapubic prostatectomy whether or not you, by choice, drain with a retention catheter. My experience is, having worked with some of these cases following operation, that the retention catheter is a source of worry to the patient. I think if a suprapubic operation is to be done nothing compares to making the suprapubic opening as large as you need, putting in a catheter which will be water tight and then closing it, and when the final operation is done the incision can be re-opened in one place and though the tissues are edematous and swell, it is all sealed off.

ALEXANDER RANDALL (closing): Dr. Hamer was very kind in throwing his bouquets on starting this discussion, and I can frankly tell you that it has been a great pleasure for me to be with you. Moreover, it is always a great incentive to prepare a paper like this.

Dr. Grant bought up two points which I would like to emphasize. In this series of mine, there were eighteen two-stage prostatectomies. Personally, I operate this way only when forced to do so, and prefer catheter drainage whenever it is possible. What the two-stage operation has done, I believe, without any question, is to force the attending surgeon to drain first, prepare his patient second, and do the prostatectomy at some later date when conditions are at their best. It is definitely indicative in hemorrhage and in the presence of a calculus, but for all other cases I prefer to prepare my patient by catheter drainage.

Dr. Grant also spoke of the success of the punch operation in cases of hypertrophy. I have shown you on lantern slides some small but definitely obstructive hypertrophies that are quite within the reach of the punch and which should accomplish their complete removal, but in cases where there is a general hypertrophy, I fear that it is but postponing an inevitable operation, though frequently apparent temporary results can be obtained. As you all well know, the same is true of an indwelling catheter which frequently will allow an acute congestion to subside and normal urination to ensue for an indefinite period of time. I do not believe that it will decrease the ultimate need of a prostatectomy when true generalized enlargement has once started.

Dr. Klingler asked about the cases that were not operated on. Frankly, I see very few such cases, for I feel that everyone properly handled and properly prepared can be carried through a successful prostatectomy, with greater promise of ultimate cure and long life than by placing them upon a catheter existence.

Dr. Stoltz disparagingly spoke of his own technic of operating, both suprapubically and perineally, at one and the same time. Dr. Stoltz

is in very good company, for years ago this method was advocated by a number of the early prostatectomists. Today I find Lowsley in New York draining suprapubically and doing his prostatectomy perineally, and only the other day there appeared in the *French Journal of Urology* an article by Delore advising exactly what Dr. Stoltz has been doing. In difficult cases it might be well worth while, and certainly the perineal drainage is an advantage in all cases. In fact, the celebrated Dr. Agnew used to say to his students in speaking of lithotomy: "Why climb up and go down through the skylight when the cellar door is open!" I would add to Dr. Stoltz's remarks that I am sure that he will find that he can remove his drainage at an earlier time and not fear post-operative hemorrhage.

Dr. Erdman brought up the question of the care of the ward patients. I do not wish to infer that our ward patients receive less actual hospital attention than the private patients, my point being that the actual recuperative power of the ward patients is less than that of the private patient, and that moreover they are apt to come to us in a more pitiable condition with a longer history of trouble, which in every case jeopardizes their recovery. We do not hesitate, where needed, to even put special nurses on the ward cases at the hospital's expense.

Again, I wish to thank you for your interest in this subject and to assure you of the pleasure it has given me to be with you.

## ROENTGENOLOGICAL EVIDENCE OF NASAL SINUS DISEASE\*

ITS IMPORTANCE IN POST OCULAR AFFECTIONS

DRS. COLE, BEELER AND SMITH  
INDIANAPOLIS

In a review of the literature relative to the value of the x-ray findings in disease of the accessory nasal sinuses it would seem that the consensus of opinion, as expressed by rhinologists, is that roentgenology supplies evidence of very doubtful value. This view is now rapidly undergoing a radical revision. The recent work of Granger<sup>1</sup>, Grier<sup>2</sup>, Skillern<sup>3</sup>, Pfahler, Law<sup>4</sup> and others has demonstrated beyond a doubt the value of a careful and thorough roentgenological examination of the nasal sinuses by the newer technical methods.

For a long period of time the x-rays were merely an agent by which a knowledge of the size and contour of the nasal sinuses could be obtained, but with the development of more efficient technical methods they are now acknowledged to be of considerable worth in determining pathological conditions within these cavities. Until recently the best results have been obtained in the more superficial sinuses, the maxillary and anterior ethmoids, but now it is possible to obtain a great

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deal of information with reference to the posterior ethmoidal and sphenoidal sinuses.

The roentgenology of the accessory nasal sinuses has interested roentgenologists and rhinologists since the early years of the present century. It was at first supposed that the pus contained in the sinuses was responsible for the shadow appearing on the plate. This was refuted by Chisholm (1906), who made a number of interesting experiments with gelatin capsules, filled with pus, blood, water, etc. It also has been shown that liquids, from thick pus to clear water, after being injected into the sinuses, show about the same shadow density (Skillern). From these observations it was concluded that the swollen mucosa exerts a greater influence in causing shadows than does the character of the free secretion in the sinuses. This conclusion was confirmed by Albrecht<sup>5</sup>, who found that there was no difference in the roentgenograms of the same antrum when filled with pus and after lavage. This observation is, however, open to question, as the same author was able to produce a distinct shadow by injecting purulent secretion into an antrum which previously had shown perfectly clear. Our own observations as well as those of others would seem to demonstrate that while extensive tissue changes are more amenable to skiagraphy than free secretion, nevertheless both exercise a given amount of influence on the plate.

Ballenger<sup>6</sup>, who studied 100 cases of suspected chronic nasal accessory sinus disease from the roentgenological standpoint, says that certain conditions can modify the density of the shadow other than the products of inflammation within the sinus cavities, such as asymmetry of the bones forming the sinuses, inequalities in the thickness of the bones of the face, and the angle from which the exposure is taken, and this statement has been confirmed by many roentgenologists.

We will review without going too much into detail the technical developments that have been of special service in increasing the value of roentgenological examination of the nasal sinuses.

It is unnecessary to describe the technic for obtaining roentgenograms of the superficial nasal sinuses, the antrum, frontal and anterior ethmoids, as both the technic and the value of x-ray examinations of these sinuses is well established and generally accepted by both roentgenologists and rhinologists. But with the posterior ethmoids and sphenoids the situation has been far different. In obtaining reliable roentgenograms of these sinuses great difficulties have been encountered, and rhinologists have been unwilling to place a great deal of confidence in the findings of the roentgeneologist.

Spiess<sup>7</sup> in 1909 and Pfeiffer<sup>8</sup> in 1910, by using a new photographic position, were able to obtain satisfactory negatives of these deep-lying sinuses. Pfahler and Skillern also experimented along these lines, with satisfactory results so far as the superficial sinuses were concerned, while their re-

sults were only moderately satisfactory in reference to the ethmoid and sphenoid sinuses. It seems to have been the consensus of opinion that the skiagraphic findings so far as the anterior ethmoid cells are concerned were of absolute reliability. Coakley, Albrecht and Killian lay stress on this point. Killian even says that it is possible to state whether the severity of the disease is greater in the ethmoid or the frontal from a comparison of the shadows. Skillern, however, expresses himself as having been disappointed at operation to find little evidence of pathologic change in cases in which the x-ray plates had led him to suppose very definite pathology was present. It was, however, to the work of Granger, followed by that of Law, Grier, Aspray and Powers that we owe the development of a technic by which not only the conformation of the posterior ethmoid and sphenoid sinuses can be determined but considerable information of the pathological condition of these sinuses is also made available.

In a paper read before the Radiological Society of North America at its meeting held in Rochester in 1923, Amedee Granger described in detail a method which shows the boundary landmarks of the sphenoid sinus and the ethmoid cells. He was able to do this by taking radiographs of skulls and heads in his alveola-glabella position on 107° and 23° angle blocks, respectively. Experiments proved that in this position it was possible to make exact duplicates of the same skull or head and strikingly similar radiographs of very different shaped ones. The radiographs showed that what is known as the Granger line is produced by that portion of the upper surface of the sphenoid bone called the optic groove; and another line is shown which is produced by the central or inner plate of the orbital or horizontal portion of the frontal bone. Up to this time it had been believed by roentgenologists that this line was produced by the lesser wing of the sphenoid. After removing the lesser wing of the sphenoid the same line was still shown in the roentgenograms. A line is also produced by the posterior edge of the floor of the anterior cerebral fossa and another by the greater wing of the sphenoid. Occasionally a line is seen which is produced by the floor of the sella turcica. A line showing the anterior boundary of the sphenoid sinus, the upper boundary of the ethmoid and the upper boundary of the sphenoid is seen in the 107° angle view. By a careful study of the Granger line and the subjacent area, Granger was able to tell whether the sinus was diseased or not, and when diseased to state, with a degree of accuracy not possible up to this time, that it contained pus, polypi or hyperplastic tissue.

Granger's method, briefly, consists in using a perforated plate, with a hole for the nose, the head resting on the glabella and the alveolar process of the superior maxilla. One anterior posterior view is made on a 23° angle board. Another is made on a reversed 17° angle board. One

lateral projection is made. By thus standardizing the position, the ethmoid and sphenoid cells will fall within definite areas limited by bony landmarks, and checked by comparing corresponding areas on the three different exposures.

Grier found that the correct interpretation of plates would be greatly enhanced if they were made stereoscopically. He has devised a head rest which makes the technic of stereoscopy of the sinuses as easy as if the plates were made simply by the Granger method. With this apparatus it is impossible to rotate the head laterally, which is very important, since lateral rotation projects the dense shadows of the petrous portion of the temporal bone into the maxillary sinus on one side, and this obscures the condition that may be present there. It also obscures one ethmoid region by projecting the shadow cast by bones at the bridge of the nose over the ethmoid cells on the side toward which the head is rotated. With the Grier apparatus such distortions may be overcome. Grier emphasized the importance of performing stereoscopy by shifting the tube up and down and not cross-wise of the head, since such plates are useless except when viewed in the stereoscope.

After experimenting with the technic of Granger, Grier and others, Joseph Aspray<sup>10</sup> devised a different method, which consists of taking six separate exposures of the sinuses on two 8x10-inch films and one small mouth film. He uses throughout the double screen, duplitized film technic and an average spark-gap of 4½ inches. The postero-anterior views are made under compression with a four-inch Kelly Koett cone. The lower half of an eight by ten-inch cassette is covered with a piece of sheet lead. In the center of the upper half of this cassette the glabella is centered, the patient being prone on the table with the forehead and nose touching the cassette. The central ray is directed through the head in a postero-anterior direction at an angle of 17°. Compression of the head is used to prevent its movement during the exposure. This film gives the maximum information concerning the frontal and anterior ethmoid sinuses on postero-anterior view, and gives a check also on the condition of the posterior ethmoids and maxillary sinuses.

On the lower half of the first cassette the exposure for the maxillary sinuses is taken, using the standard Wafer's position with the nose and chin touching the cassette. The central ray is directed in a postero-anterior direction through the head, centering on the antra, and with the antra in the center of the exposed area. The average angle used in taking this exposure is about 18°, the angle being varied for heads of different shape. This view gives the maximum information concerning the antra, and is a check on the frontals.

The second film shows three exposures. On the upper half of this cassette is taken the postero-anterior view of the anterior and posterior ethmoids and sphenoids, with the central ray directed

upward at an average angle of 10°, centering on the glabella with the ray passing through the superior portion of the sphenoid sinus. This gives the density, size and outline of the sphenoidal sinus, superiorly projected into the frontal region. It also shows the superior curved line of the sphenoid (the Granger Y line). Powers points out that in cases in which the frontal sinuses are involved, unilateral, small or absent, less reliable information is obtained from this view concerning the sphenoid sinuses. This view shows just below and partially superimposed on the sphenoids, the posterior ethmoid cells. Valuable information concerning the density of the posterior ethmoids is often obtained from this view, and it also gives a check on the anterior ethmoids.

On one of the lower quarters of the second cassette a lateral view of the frontal and posterior ethmoids is made, which gives valuable information concerning the depth of the frontal sinus and the projection of the frontal cells into the horizontal plate of the frontal. The thickness of the anterior frontal plate shown by this view is valuable as an aid in determining the significance of frontal density. Additional information is obtained concerning the posterior ethmoid density, though the two sides are superimposed by this view.

On the remaining quarter of the cassette a lateral view of the sphenoid is made, using a small cone centering in the sella turcica. This gives information concerning the extent and pneumatization of the sphenoid density, and often a certain degree of information concerning the posterior ethmoid cells. The two sphenoids are superimposed in this view.

The sixth exposure is made on a small film in the mouth, using a specially designed cassette, fitting snugly so as to prevent its moving about. The central ray is directed through the vertex of the head at an average angle of 90°, centering through the sphenoid onto the mouth cassette. Aspray modifies Pfahler's technic by having the patient lie on the table with head and shoulders resting on a pillow.

Mouth films give a maximum amount of information concerning the posterior ethmoids, valuable information concerning the density of the sphenoids, and at times slight information concerning the density of the anterior ethmoids. Aspray believes it is necessary to take these six separate films in order adequately to demonstrate all of the sinuses.

After trying many methods, R. A. Powers, like Grier, became convinced that accurate ethmoid and sphenoid interpretation was more nearly possible with the stereoscopic method. He adopted the 107° angle plate with the addition of an upper tube shift, the patient retaining the erect position in order to bring out fluid levels. He made use of a combination of Granger's 107° angle method with a five-inch upper tube shift at forty inches distance through a small dental cone, with a



lateral and a Water's projection which he points out gives the most useful information regarding the paranasal sinuses. By this method certain difficulties encountered in the application of the Granger method are avoided.

The interpretation of the x-ray plates is of the utmost importance. Accurate interpretation depends upon the degree of knowledge of the roentgenologist concerning the anatomy of the nasal accessory sinuses. He must know when these structures are normal and when abnormal, and he must be able to appreciate which structures may be superimposed upon the shadow of the sinuses. The x-ray examination of large numbers of skulls has shown that there are many variations from the normal in the size and contour of the accessory nasal sinuses, and these the roentgenologist must be prepared to interpret correctly if he hopes to avoid leading the rhinologist into error. The roentgenologist must also be familiar with the types of shadows produced by the different pathological conditions met with in the nose and accessory sinuses. A great deal of study has been given in the effort to correlate the various pathological conditions with the appearances seen on the x-ray plates. These Skillern and Grier have endeavored to summarize after the following manner:

*Acute Sinusitis, Catarrhal Type*—An antrum filled with pus as the result of an acute infection, and perhaps present for only a short time, a week or ten days, looks no different on a roentgenogram from an old chronic empyema which may have existed for years, yet from the standpoint of the rhinologist the difference is quite important. An acute catarrhal sinusitis doubtless occurs frequently as a complication of acute coryza, the inflammation spreading through the sinuses and producing a condition similar to that seen in the nasal mucosa. Roentgenograms of this condition are seldom seen, as no one thinks of having an x-ray examination for an acute cold in the head. When the mucous membrane of the sinuses becomes much swollen and edematous, the changes are shown on the roentgenogram as a very slight, but uniform, opacity; the density, however, is much less than where the sinus is filled with pus. With occlusion and pus present in the sinuses, the density would be much greater. It may, therefore, be said that when there is slight uniform opacity it is safe to attribute it to inflammation without pus. When the mucosa is but slightly engorged the x-ray examination may be absolutely negative.

*Acute Suppurative Sinusitis*—This condition usually arises when there is swelling of the mucous membranes which obstructs drainage, the retained secretions become infected and pus accumulates in the sinus. Infection of one or more sinuses may occur without obstruction. In fact this type of infection often occurs as a complication of acute infectious disease and pus may form very rapidly. This type of infection is seen on

the x-ray plate as a dense, uniform shadow entirely blotting out the sinus outlines. The roentgenogram under these conditions is no different from that produced by an empyema of the sinuses. Furthermore, in the catarrhal stage of an extremely virulent infection causing extensive swelling and edema of the mucous membranes the shadow shown in the roentgenogram may be as dense as that caused by a sinus full of pus. Where such a condition is suspected, it becomes necessary to determine the presence of pus by methods other than those of roentgenology.

*Chronic Sinusitis*—Chronic sinusitis may be suppurative or hyperplastic. If it is of the suppurative type the x-ray findings will naturally be similar to those found in acute sinusitis of the suppurative type, except for the fact that they will not show the tendency to return to normal in a brief period of time.

In the hyperplastic type of sinusitis the conditions causing increased density on the x-ray plate are due to hypertrophy of the constituent parts of the mucosa lining the sinuses, and there is no pus present. The roentgenograms of these so-called "dry sinuses" are exactly the same in appearance as in those of acute catarrhal sinusitis, i.e., a slight uniform opacity. The shadow is supposed to be due to the thickening of the mucosa with an increase of connective tissue in the submucous layer, and possibly some hypertrophy of the periosteum.

*Polypoid Degeneration*—In this form of degeneration all of the layers of the mucosa undergo degenerative changes. The epithelium becomes squamous in character and there is round cell infiltration of the submucosa, the periosteum becomes hypertrophied, and occasionally the bone is eroded. The overabundance of serum leads to the formation of polypi, with marked hypertrophy of the connective tissue elements. A marked thickening of the mucous membrane results which produces opacity in the roentgenogram. The polypi are not necessarily visible on the roentgenogram. Grier describes three different appearances which may be seen in connection with polypoid degeneration: (1) A few large polypi may be recognizable, being oval in shape with smooth, well defined borders. These are seen best in the frontal and maxillary sinuses. In the ethmoid the polypi are probably too small to be seen individually. (2) The appearance may be suggestive of the hyperplastic type of sinusitis, there being marked thickening of the mucosa. This change can only be detected in the antrum, usually on the internal and inferior walls. In the antero-posterior position it is seen on edge and shows very plainly. Grier does not consider this appearance as definitely indicative of polypoid degeneration; it may be caused by thickening of the mucous membrane due to repeated attacks of chronic suppurative sinusitis. (3) There may be an increased density which is not uniform like the shadow cast by pus, but is more or less

mottled. The edges of the sinus are not blotted out as they are when a sinus is filled with pus. These changes can be detected only in the frontal and maxillary sinuses, though usually the ethmoid is also involved. The mottled appearance of the shadow is due to the irregular thickening of the mucosa produced by the polypoid growths, the irregular deposits of connective tissue and the periosteal thickening. This process is much more easily identified in the antrum than in any of the other sinuses. When all the sinuses are filled with polypi a dense, uniform shadow is cast similar to that seen in pansinusitis when all the sinuses are filled with pus. The only differential point, according to Grier is that when extensive polyposus is present the sinuses are bulging and this can be recognized in the ethmoid region.

In empyema, or chronic suppurative sinusitis, the frontal, ethmoidal and maxillary sinuses may be involved. Where the frontal and ethmoidal cavities drain into the maxillary, their condition may not be recognizable by the x-rays unless the rhinologist washes out the maxillary and plugs up the openings from the frontal and ethmoid, thus allowing these cavities to be filled with the retained secretion which may then be demonstrated roentgenographically. If only a few of the ethmoid cells are involved it may be impossible to detect the change by the x-rays. If the ethmoids and sphenoids are involved and the frontal is clear, the inference is that the process is in the posterior ethmoids; if the ethmoids and frontal are involved and the sphenoid is clear, it is assumed that the infection is in the anterior ethmoids.

Making an x-ray examination before and after washing the sinuses in the presence of a chronic suppurative sinusitis makes a marked difference in the opacity of the sinuses and will probably determine whether pus is present or not. It has been found that syphilis at times causes thickening of the mucous membrane which cannot be differentiated from pus.

In chronic empyema of the frontal and ethmoidal sinuses there may be destruction of the bony wall, allowing the escape of pus into the orbit. The point at which the break in the bony wall occurs can usually be demonstrated by x-ray examination; the site of rupture into the cranial cavity may be more difficult of demonstration.

Sometimes when there is dense shadow in the frontal region it becomes necessary to ascertain whether it is due to an empyema of the frontal sinus or to absence of the sinus. Absence of the frontal sinus may be recognized on the x-ray plate by noting the normal bone structure in that location, whereas, if the region looks opaque because the frontals are entirely filled with pus the bone structure will not be visible. Grier warns against giving an opinion on this point unless the plate shows sufficient detail to enable the structure of the frontal bone to be clearly seen.

When chronic hyperplastic sinusitis is accompanied by suppuration the appearance presented

is usually that of hyperplastic sinusitis in some of the sinuses and pus in one or more of the other cells. There is no way of demonstrating the existence of both lesions at the same time, except, possibly by washing out pus if it happens to be in the antrum.

As in describing the newer methods of roentgenology that have been applied to the posterior ethmoid and sphenoid sinuses we have indicated the special information that may be obtained with reference to these cavities we will not attempt to enter upon a more elaborate discussion of the findings in relation to the various pathological conditions that may affect these sinuses. As this phase of roentgenology of the nasal sinuses is still in its infancy the exact significance of opacities produced by pathology in this region has not been as definitely established as for the other sinuses. The most important feature thus far demonstrated is that actual density is not as important as the outline of the individual ethmoid cells and that of the sphenoid sinus; a blurring of the outline is more indicative of the presence of a pathological condition. Substantiation of suspected disease by successive exposures should be made before deciding upon extensive operative procedures in this region.

Since it has been demonstrated beyond the shadow of a doubt that accessory nasal sinus disease may be responsible for a large variety of ocular affections, and also that nasal sinus infection may give rise to disease elsewhere in the body, the importance of locating and eradicating such foci of infection increasingly impresses itself upon the mind of the oculist and the internist. Another fact to be taken into consideration, is that the anatomical location of the sinuses often makes diagnosis by ordinary clinical methods exceedingly difficult if not impossible. These facts make roentgenological examination a very essential procedure. Both rhinologists and roentgenologists should make more intensive efforts to correlate the x-ray findings and pathological conditions affecting the nasal sinuses, particularly the ethmoid and sphenoid cavities. It is highly important that a knowledge of the very definite aid that roentgenology is prepared to render in the diagnosis of nasal sinus disease be conveyed to rhinologists, ophthalmologists, neurologists and internists, in order that they may come to see that there is no just ground for the pessimist, so often expressed in the past, with respect to the value of roentgenological examination of the nasal sinuses.

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#### DISCUSSION

KEITH T. MEYER (Evansville): As a roentgenologist I wish to thank this section for the privilege of discussing Dr. Beeler's paper. I also wish to congratulate Dr. Beeler on his excellent discussion of the radiological phase of sinus infection. I do not know of any radiographic technique that is more exacting than that of radiographing the accessory sinuses. If your technique is not correct, you are off in your diagnosis.

I would like to speak of several things which make for an incorrect interpretation of a radiograph. The most important of these are: (1) A patient will go to a rhinologist with a definite sinus infection. The rhinologist will apply cocaine or adrenalin to the mucous membrane, shrinking it down; there will naturally be a copious drainage. The rhinologist will then refer the patient to the roentgenologist for radiographs of the sinuses, and possibly two or three hours will elapse before the patient reports for a radiographic examination. In the meantime there will be a very copious drainage coming from the antrum. When the radiographs are taken, the sinuses are clear. The reason for this is, of course, obvious, because in the interval between the examination conducted by the rhinologist and by the roentgenologist, the patient has blown his nose, completely draining both the antra and the ethmoids. (2) Again, if the infection is a chronic one, the radiograph will reveal a positive antrum. The surgeon does a puncture and gets nothing. That does not necessarily mean that the antrum is negative. If a radical operation is performed, we will find an antrum filled with granulations or polypoid tissue. (3) Occasionally we have an absence of an antrum on one side. Again the radiograph would reveal a positive antrum. (4) Another possibility is an antrum with an anterior and a posterior compartment, either one of which may be infected. The surgeon, on doing a puncture, may puncture the compartment not infected. Again, the radiograph would be said to be wrong. A careful study of the lateral view would reveal the reason for the negative puncture.

During the past two or three years, in all chest cases referred to the Walker Hospital Clinic, particularly those that do not show any radiographic evidence of tuberculous infection, but do show heavy hilar shadows with considerable peribronchial infiltration extending out into the lower two-thirds of the chest, a radiographic examination of the sinuses is made. In these cases we have detected a large number of latent antrum infections that possibly would not have been discovered

had we not made the radiographic sinus examination. I wish to emphasize that before a definite diagnosis of sinus infection is made, these findings are always checked by the rhinologist.

I would like to report a case which shows how a latent sinus may be discovered by a radiographic examination. This case was a girl, sixteen years of age, with a marked swelling of the soft tissue of the entire left side of her face. There was a marked chemosis of the conjunctiva. The patient was referred by a dentist who requested dentograms of all the teeth in the upper jaw. A fairly large periapical abscess was found on the end of the upper left lateral incisor. A radiograph of the antra revealed a marked opacity of the left antrum. Dr. Ravdin, Sr., one of the consulting rhinologists of this clinic, was called in for consultation. The clinical history was negative for a sinus infection. Dr. Ravdin suggested that possibly the marked swelling of the soft tissue overlying the antrum accounted for the cloudiness of the antrum. However, it was decided to remove the infected upper left incisor and to do a diagnostic puncture of the left antrum at the same time. This was done and resulted in the evacuation of considerable foul smelling, purulent material from the left antrum.

KARL T. BROWN (Muncie): Dr. Beeler asked me to give you the history of an interesting case. A little girl seven years old one day ran to her mother and said, "Something has happened to my eye." The right eye was completely drawn in so that you could see only a little bit of the pupil. She was taken immediately to one of the best ophthalmologists who said there was nothing the matter with the eye. She was then taken to a neurologist, whose findings were negative. She was then referred to me; and with the history of the case, that she had had a cold for some months, with great quantities of pus, and with the appearance of the mucous membrane of one nostril, which was hyperemic, I had a picture taken of the entire skull. It was negative except the right antrum. I sent her to the hospital and under an anesthetic we observed the eye, but it did not come to a position to cause me to make a diagnosis of paralysis of the internal rectus muscle. Had it been a spasm of the internal it would have relaxed under an anesthetic. I irrigated and got a large quantity of pus. I then resected a window and took out two-thirds of the nasal anterior wall which took off a small portion of the tip of the turbinate. She went home in forty-eight hours, and just eleven days after she said to her mother one day, "My eye is all right." The eye had come into its proper position. That was two years ago and since then she has had no trouble, and a picture shows that the antrum is clear.

F. V. OVERMAN (Indianapolis): I know of no subject in which there has been more discussion and disagreement among rhinologists than that of x-ray findings. In the past three years I have become convinced that I have overlooked many

cases of sinus infection. Before that when we irrigated an antrum and the return flow was apparently clear we considered the antrum negative. Some three years ago I began using a black catch-basin instead of a porcelain, and from the first of last October my records show that thirty-five percent of the people who come into my office, regardless of their complaint, have infection of one or both maxillary sinuses. To me that is an appalling figure. I do not mean to say that they all complained of pus, but I am sure with the black basin I can make a better diagnosis by looking at the return flow than with a white basin, and I am firmly convinced when I see a lot of shreds and flecks that we have an infected maxillary sinus.

Just recently a young man came to me, a tenor singer who had seen a great many men, among them a well known man in Cincinnati. This man is suffering from continuous frontal headaches. I looked into his nose and felt positive he had a maxillary sinus infection. He said another man here had advised him to have an x-ray taken, so I went up to Dr. Beeler's office to look at it. It showed a thickening of the wall of the right maxillary sinus and lack of air. He came back to my office and I irrigated and got a quantity of flecks and thread-like shreds of pus. He came into my office three days later and said he had not felt as well for years—after just one irrigation. I believe in a case like that a window resection under the lower turbinate without sacrificing any of the turbinate will clear up the case. I am sure it is not a matter of drainage but of ventilation.

I depend very little upon transillumination. The day before I came away a young man came in suffering with cold infection, and on transilluminating him the right nostril showed clear, but I was convinced from the clinical picture that there was trouble in the antrum, so I irrigated and got at least an ounce of thick yellow pus. I have had that experience several times, so I depend less on transillumination every day.

I have had a number of cases in which Drs. Beeler, Cole and Smith have said there were polyps, and in which after doing a radical antrum I resected a window to give drainage and ventilation. In all but one case the picture showed later that the polyps had disappeared. In one case Dr. Beeler outlined on the plate a large polyp. I did a Caldwell-Luc operation with the picture before me and located the polyp exactly where Dr. Beeler had found it.

One of the worst difficulties I have had has been with dentists. I have had a number of cases where teeth had been extracted that communicated with the antrum and I insist that at that time, no matter what the condition of the antrum, that opening must be closed, but as a rule the dentists want to leave it open to drain.

The thing I want to emphasize is that if these cases do not clear up after irrigation we should

do a window resection, sacrificing as little of the turbinate as possible. In other words, ventilation and aeration mean as much as drainage.

C. NORMAN HOWARD (Warsaw): Suppose the x-ray shows a distinct shadow and pus is found on opening that sinus. Then, suppose, sometime later, no more pus is being found and the patient is apparently well. Is the x-ray of value at that stage in helping to determine whether or not to discontinue treatment?

Might it again show a shadow, due to a hyperplastic condition of the tissues, though the sinus was clinically well?

RAYMOND C. BEELER (closing): I want to thank the section for allowing us to present this subject. Also to thank the discussants. I feel like we have accomplished something of value, after such complimentary discussion. For some time we have succeeded in pointing out with the x-ray, pathology other than pus in sinuses. Now some of the work has given us a better understanding. This is probably due to the getting together before the viewbox of the otolaryngologist and roentgenologist and while here talking over the case with the films before us. Seeing this with his own eyes is much better than the reading of a long descriptive report. The roentgenologist can often explain himself by using the films and make the findings much clearer.

In answer to Dr. Howard's question, when we have a dense chronically thickened sinus it is best to try and wash out this sinus, give it some air and then reread. This may gain us more knowledge as to the actual condition in the sinus. Often polyps will be demonstrated that are not shown before on the primary film. There is a method that we use in these cases that is quite helpful and it is as follows: The antrum is filled with a twenty-five percent neosilvol solution or iodized oil. Polyp will displace the opaque substance and we will obtain the size and position of such a polyp by using this method.

The roentgenologist must be responsible and give the otolaryngologist his findings from his films. The films must be made so that all pathology will be shown. Under or over exposure will often fail to show the actual condition present. The landmarks, however, on the films should be of great value to the otolaryngologist during his operative work and the films before him will often solve some of the complex problems that arise.

The location of the pathology is a big help, especially in these cases of hyperplastic changes that are so often the cause of serious eye or other symptoms. I think that these hyperplastic changes can be depended upon when once shown, even though the nasal signs are not present. Repeated examinations of the nose may finally discover the pathology. The sphenoids with the new technique have proven this to us in many cases.

Aeration is an important thing and should be read in the x-ray films. A vacuum sinusitis is often shown.



## REGIONAL ANESTHESIA IN SURGERY\*

W. R. DAVIDSON, M.D.

EVANSVILLE

Let it be clearly understood that I am not reporting anything new or original, but that I desire to bring before this association some features of local or regional anesthesia which have been neglected in our programs and which in practice have been valuable.

Local anesthesia has, of course, had a certain field for many years. Cocaine, the Schleich solution, and later various synthetic solutions have been used and with good results. But the field was comparatively limited for perfect anesthesia, the abdominal cavity remaining almost hopeless. Yet there have been performed many operations within the abdominal cavity for years, but there was pain to a greater or lesser degree, interfering with the operator and conveying a poor impression to the patient.

The common method familiar to all of us has been the infiltration method, the blocking off of a certain area. This has been and still is, in common use. But because of its familiarity I shall omit any discussion of the infiltration or field block method.

True regional anesthesia, here considered, is that form induced by the deposition of an anesthetic solution at a definite anatomical point or points, whereby anesthesia is induced in the area supplied by a definite nerve. Thus, it consists of a nerve block in which the solution is injected either intraneurally or extraneurally. If the solution is injected at the point of emergence of nerves from the spinal column, it constitutes paravertebral block. Splanchnic block is induced by injection of the semilunar ganglia and solar plexus, from a point lateral of the spinal column reaching to the anterior surface of the first lumbar vertebra. Transsacral block is that form of injection of the sacral nerves through the five foramina. Caudal block is that form of blocking spinal nerves through the caudal hiatus in the subdural space.

Intraspinal anesthesia is the blocking of the roots of the spinal nerves within the dural canal. With these forms in mind, it is seen that their methods allow an accurate anesthesia to be induced and demonstrate the need of exact anatomical knowledge for the solution can be placed only at a certain point to obtain the desired result. Therefore, practice on a cadaver using methylene blue, followed by dissection is necessary. In blocking, for instance, the Gasserian ganglion, one is dealing with a point in which the variation must be less than a centimeter. There must be a perfect knowledge of the relationship of the vessels to the bones, and vessels, and one must have the power of visualization in order to know exactly where the point of the needle is located. This is not the time or place to discuss the methods, solutions,

etc., but only the principles, in order to show the possibilities for us as surgeons.

In the paravertebral form the solution is injected using the lateral processes of the desired vertebral as a guide, and injecting the solution at a point where the nerves emerge. Depending on the segments of the spine involved there are the paracervical, paradorsal and paralumbar forms.

The paracervical injection is made at two points on each side of the neck, thus rendering the cervical region anesthetized for operation on the thyroid, larynx and lymphatic glands. There is no injection at random with the hope of interfering with nerve transmission. For example: a brachial plexus block is one of the simplest forms consisting of only one injection into the plexus, yet the whole arm becomes anesthetized. For tendon suture in the hand or arm it affords an admirable anesthesia as motion of the retracted tendon quickly locates its end. The branches of the brachial plexus may also be injected directly at lower levels in the arms. Paravertebral, dorsal and lumbar blocks are performed in the same way, injection of the nerves as they emerge and necessarily, on account of depth, accurate knowledge is necessary. The dorsal block is used for operations on the thorax and upper abdomen. It is necessary to use brachial plexus block with it in operations on the upper extremity and axilla or radical amputation of the breast; and in case of abdominal organs, the kidneys and ureters, the lumbar block will be needed. The number and location of nerves blocked depend, therefore, on the part to be operated. The lumbar paravertebral block is one for combined use, chiefly as stated above, for kidney, ureter and abdominal organs, but for pelvic and lower extremity is combined with the sacral route.

The spinal form is one which has for a number of years been given much consideration because of the dangers involved. Injection of an anesthetic fluid into the spinal canal has been followed by fatalities and has caused more or less fear. Stovain, the substance usually given, has been found to decompose in spinal fluid and to cause irritation of the meninges. Labat, however, has shown that the real cause of the danger is the faulty position. The nerves anesthetized naturally include the rami communicantes, which cause dilatation of the abdominal vessels. With these dilated, the blood is at once drained into the dependent part of the body and becomes pooled. The vessels of the brain being terminal, are not supported by structures of muscle or fascia as elsewhere, and are easily collapsed; therefore, it may be impossible to restore circulation if they are drained on account of the erect position. On account of the pooling there is a marked decrease in blood pressure, especially noticeable if the blood pressure has been very high. Curiously enough, a patient with high pressure breathes much more easily while anesthetized.

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As soon as the injection into the canal has been made the patient should be placed in the Trendelenburg position in order that the dependent position will keep the vessels of the brain full and the danger of collapse is thus avoided. The usual methods of technique being observed, rarely is it necessary to use stimulants, but these should be ready in case of need. During the return of the patient to the room the lower part of the carriage should be built up to maintain the inverted position. The bed should also be raised at the foot and this position is kept from two to four hours, depending on the patient's condition. With the passing of the anesthesia the props may be removed from the bed.

Much has been said about the danger of respiratory paralysis as a result of high diffusion of the solution in the canal. This will be prevented by the withdrawal of a certain amount of the spinal fluid before injection of the novocaine, the amount ranging from fifteen to twenty cc. If the larger quantity is withdrawn, the anesthesia will probably be higher. As a matter of fact, it would seem that the condition is really due to the lowered blood pressure, since the respiratory nerves—third, fourth and fifth cervical, could be reached only by much force, in order to induce paralysis. The treatment of such supposed complication would be that for reduced blood pressure.

Spinal anesthesia is indicated for any operation below the umbilicus. Injection above the second lumbar interspace will produce anesthesia as high as the ensiform, but this should not follow if a small quantity of spinal fluid is withdrawn.

I have found spinal anesthesia very satisfactory in operations on the bladder, prostate and in amputations of the lower extremity. Crile showed the effect of the continuous trauma transmission on the brain, and since there is no transmission in this form there is no shock. The patient is able to retain fluid by the mouth, since there is no vomiting, a factor which is often of great aid.

The after-effects are very slight. In fact this is very often a subject of great interest and comment around the hospital. The freedom from nausea and vomiting is very gratifying, particularly in case of a patient who has previously been operated under inhalation anesthesia. There may be a headache varying from light to severe, but this is not a frequent occurrence and is easily controlled. Occasionally there may be insomnia.

There is some difficulty in decisions regarding contraindications as the experience of operators varies so greatly. It is generally agreed that no attempt should be made to induce anesthesia above the abdomen or in case of low blood pressure or in shock. Yet in one case in which there was a great loss of blood following an accident I used a spinal anesthesia for amputation without any trouble following. If there is low blood pressure it might be preferable to use one of the other forms of induction. It is contraindicated if an operation

is likely to be a long one, perhaps longer than an hour and a half.

Practically any operation in surgery can be performed under regional anesthesia, although as William Mayo states, it will never replace ether. Yet it has a certain field which will be broadened by a greater use. In people of neurotic temperament it is unsatisfactory, as the patient refuses to distinguish between the senses of touch and pain.

If this form of anesthesia is satisfactory in cases when ether would be dangerous, it is equally satisfactory in a normal case, or so I have found it. There are many patients who dread an inhalation anesthetic, and this method affords the needed relief. For this reason I urge a study of the possibilities.

#### DISCUSSION

O. G. PFAFF (Indianapolis): I confess that we have not done as much local anesthesia work as the case merits. In the last few years we have been doing more of it, especially for pelvic and lower abdominal work. I use sacral novocain anesthesia and it is perfectly marvelous how you can take an old man with hemorrhoids as big as your fist, inject the last foramen and carve out the hemorrhoids and dilate the rectum. There is no pain and the patient is perfectly comfortable. I had one old lady, aged seventy-five years, with extreme procidentia. She but recently suffered an apoplectic stroke and could not take a general anesthetic, so we gave her a sacral anesthetic and did a most extensive perineal dissection without pain. She recovered with almost no discomfort.

I was thinking while this paper was being read, about a case of amputation of the arm I saw at the Mayo Clinic when that Frenchman was there. He was asked where he was going to make the injection. He said, "At the plexus." Dr. Judd asked him long long he should wait and he said, "I think the patient is now ready." He amputated the arm without pain. Some one asked, "Doctor, what if in this direct method of injection you happened to come across one of the large vessels?" He said it did not do any harm. I am interested in all this. We have used this method with novocain and it has acted very beautifully. One old lady with a ruptured appendix remained perfectly quiet. We gave her a pre-anesthetic dose of morphine and then injected the novocain and while we were operating she went to sleep.

DUDLEY PFAFF (Indianapolis): Dr. Davidson mentioned some of the cases that are not suitable for local anesthetic. I just want to say that even though a general anesthetic is necessary, we need not discard local anesthetics. Anesthetists will tell you that the field block will help out the relation and reduce the amount of ether necessary. Just because you do not use local anesthetic alone there is no reason why you cannot use local combined with general and help reduce the amount of general required.

H. G. HAMER (Indianapolis): I have had little experience with spinal anesthetic, having



used it in only one case in which I was operating for stone in the bladder. I found it very satisfactory, but I have not followed it up. We have found in our work in surgery of the bladder and prostate that we get splendid results with sacral anesthesia. There are many cases in which we cannot get sufficient anesthesia by topical application of a local anesthetic to the urethra and by the additional administration of morphine and hyoscin to work in the bladder, for example, in malignancy or tuberculosis of the bladder. In these cases we find sacral anesthesia a great help. Diathermy of tumors of the bladder can be done very satisfactorily under sacral anesthesia. Prostatectomy may be done very nicely. The only reason I do not use it routinely is because of the length of time it takes to prepare the patient. Many times it takes a number of minutes for the anesthetic to take effect. It is usually effective, but sometimes it is not and must be supplemented by gas. Altogether it is a very important part of anesthesia in our work.

A. A. RANG (Washington): I am greatly impressed with Dr. Davidson's very fine paper, and also with the discussion of Dr. Pfaff and Dr. Hamer. It is an extremely interesting subject and deserves a liberal discussion. It is impressive to see a patient lying on the table, perfectly comfortable and conscious, submitting to a major operation under the effects of a local or regional anesthesia. While the subject really is old, its thorough understanding and adoption is recent, and I believe that when its value is fully appreciated, we will have more papers and discussions on it before our society and in different societies throughout the state. I think the mark of approval on the subject is the fact that our bigger medical and post-graduate schools have added to their curriculum courses on regional and local anesthesia. Within its limitations it is a wonderful thing for the patient, especially when general anesthesia is contraindicated.

W. R. DAVIDSON (closing): Some of the things brought up in the discussion reminded me of some of the things I said in the beginning. When I first prepared the paper I had twenty-four or twenty-five pages and then I cut it down to eight because I did not want to go into too much detail. Some of the points involved questions of technic.

I do not want you to get the impression that injection of the vessels is harmless. That is exactly why I studied more anatomy, particularly in reference to nerve location, than I have in twenty-five years, because one must know where the vessel is and where the nerve is. He must see the point of the needle and know exactly where that is. Before injecting he must aspirate to make sure he is not in a vessel. I make use of the maximum dose. In a large patient one would use the maximum of 500 c.c., in the ordinary size patient 300 c.c., and in the small patient not over 200 or 250 c.c. There should be a preliminary injection of one-third grain of morphine and one-

three-hundredth of scopolamin because you must blunt consciousness. In the nervous patient you have more trouble. In a case I had a couple of weeks ago, an amputation of the breast, the woman could hardly stay still on the table, even with a second injection just before she went on the table. I had the anesthetist talk to her and she became quiet and never knew I was working on her because the field was so completely blocked off.

I was glad to have Dr. Pfaff mention hemorrhoidal and pelvic work. In hemorrhoidectomy sacral anesthesia is very valuable but it takes time. When you have to locate five foramina on each side of the sacrum it takes time. The operator, unless he thoroughly understands the anatomy, should have some one else administer the anesthetic for him. If he does not understand the method he is going to go out of the area involved. For that reason I feel if we assume the responsibility of operating on a patient we have no reason to say we have not time to do it. We are being paid for our time. If we are going to give our patients the best results, lack of time is no excuse for failure to use a method. I have heard a number of men say, "I have not time." Why not employ some one else to do it. To the man specializing in the anesthesia it is a very valuable assistant because he then has knowledge of the methods.

O. G. PFAFF (Indianapolis): May I remove a wrong impression? The doctor to whom I referred said, "into," not "through." He could wound the vessel and do no harm.

## ACUTE OTITIS MEDIA

D. O. KEARBY, M.D.  
INDIANAPOLIS

### *Etiology:*

(a). Due to infective agents and in order of frequency.

1. Common colds.
2. Acute exanthemata.
3. Influenza.
4. Acute sinusitis. More particularly ethmoiditis.

(b). Due to physical agents.

1. Adenoid and tonsils. Notice that adenoid is given preference to tonsil in the nomenclature.
2. Improper blowing of the nose.
3. Nasal douche, improperly performed.
4. Diving and swimming under water.
5. Traumatic injuries to the drum membrane.

### *Micro-organisms:*

Found in the ear during acute middle ear infections. (a). Named in order of frequency.

1. Streptococcus—haemolyticus and non-haemolyticus.
2. Pneumococcus.
3. Streptococcus mucosus.
4. Staphylococcus—Albus and aureus.
5. Long list of organisms not requiring special mention.

(b). Named in order of severity.

1. Streptococcus haemolyticus.
2. Streptococcus mucosus.
3. Pneumococcus.

Assuming the above statements to be fairly accurate, however one cannot prognosticate the future severity of the course of the disease from the micro-organism found.

Perhaps an exception to this rule might be useful in pandemics, like that of the recent influenza. Some observers have stated that when streptococcus haemolyticus is recovered; when incising the drum, that drainage, through the mastoid, should be instituted at once. I think, in the main, the last statement or exception is correct in severe pandemics of streptococcus haemolyticus infections, but in this paper I desire to apply my observations to civil life. Therefore, the question of body resistance, perhaps, will enter our prognostication as much as the type of organism.

*Anatomical Conditions* in the middle ear, as factors, which bear directly upon the symptoms and course of the disease.

1. The middle ear cavity is lined with an exceedingly thin membrane.
2. The upper part, tympanum or attic of the middle ear cavity is practically separated from the lower part or atrium, by the ossicular chain of bones and ligaments.
3. Reduplication or folds of mucous membrane in the middle ear are so arranged that fairly distinct pockets or pouches are formed within the cavity. These pockets are closed abscesses, frequently, in a suppurative middle ear and must be considered in opening the ear drum. A free incision, rather than a puncture, should be made for two reasons:

(a). To make sure that the pockets are opened.

(b). To prevent a hernia of the re-duplicated fold of mucous membrane through the incised drum. In three cases I have seen a hernia of a fold of mucous membrane, through a puncture, thereby obstructing all drainage.

#### *Inflammatory Conditions:*

An inflammatory process in the middle ear represents about the following:

1. Marked dilatation of the blood vessels in the lining membrane.
2. Transudation of serum and migration of leucocytes from the veins into the muco-periosteal lining. This swelling fills the cavity and closes the openings between attic and atrium.

If the pus or infected serum confines itself to the lower part or atrium, pressure will be exerted on all sides of the cavity, but the outer wall or drum membrane will offer the least resistance and we will see it bulging in its lower quadrant. Consequently, spontaneous rupture will take place there. If incision is made in the drum, it should, likewise, be made in the posterior inferior quadrant.

If the pus or infected serum confines itself to the attic or upper part, bulging of the drum will

be in the Schrapnell's membrane. This is rare, but I have seen it in a few adult cases. It must be clear, from a study of the tympanic anatomy, that pus collecting in the attic or vault of the middle ear must soon find its way into the mastoid antrum. Therefore, the antrum is usually, to some extent, involved in suppurative inflammations of the attic and sensitiveness to pressure over the mastoid antrum is rarely altogether absent. Mastoid antritis, in infants and children, mastoiditis, in adults, will easily complicate this condition. Free incision should be made through the bulging superior quadrant.

If pus or infected serum involves the whole of the middle ear cavity, incision should begin at the lower marginal attachment of posterior segment and extend upward to and through the posterior fold so the knife will enter and provide drainage from the attic.

#### *Symptoms and Signs:*

(a). In children.

1. Otitis, in children, in many instances, occurs during the course of an illness, say for example, in measles, and unless daily otoscopic examinations are made the early diagnosis is not made.
2. If after the acute symptoms of the primary disease have subsided, a rather constant or sudden elevation of temperature occurs, otitis should be expected.
3. When in infants or young children there is restless sleep, with sudden outcries, fever, usually higher at night, inflammation of the middle ear should be thought of. These little tots cannot localize pain. Older children, who can localize pain, usually describe it as "stinging" in character.
4. It has been frequently stated that otitis media in young children and infants is always ushered in with high elevation of temperature. This is not always true. In some cases there will be pus in the middle ear with normal or but slightly elevated temperature. However, I think that this is rare and usually seen in cases that complicate exanthemata.
5. It is generally thought that otitis media suppurative is always accompanied with pain in the ear. This is not always true. I have seen recently, a child, five years of age, with a temperature at examination of 105°, suffering bilateral suppurative otitis media and no pain. This temperature had persisted for several days. Free incision, under nitrous oxide anesthesia, released pus from both middle ears and the temperature subsided.
6. In children under three years of age the subjective symptoms are so indefinite as to be of little or no diagnostic value.
7. Adenoid vegetations are the anatomical factors in children that should be considered and emphasis should be placed upon



them to the laity. Removal is the only treatment.

(b). In adults.

1. A prodromal symptom or sensation of fullness or occlusion of the ear is usually noted. This condition represents the infection and swelling when it is still confined to the eustachian tube. Such a prodromal sign is not always present, however, for in some cases the onset of pain is sudden, gradually increasing in severity, until almost unbearable.
2. As a rule the temperature is never high like that in children.
3. The middle ear if opened early will be filled with infected serum and frequently in the influenza cases with gas. My observations have been that those cases with much gas distention develop a mastoiditis.
4. Physical changes in the drum membrane are the same as noted in children. Incisions for drainage should be governed by the same laws.

*The Discharge:*

The discharge as a rule reaches its maximum flow on the second or third day after spontaneous rupture or incision. For a few days it is profuse and gradually recedes. The time elapsed may be from a few days to two, three or more weeks, depending upon the resistance of the patient and the virulency of the organism.

*Differentiation:*

Otitis media must be differentiated from otitis externa or plain boils in the auditory canal. The latter which are always confined to the hairy portion of the canal, or about the external one-half, will elicit pain upon any movement of the auricle. Both conditions may co-exist.

*Complications:*

1. Acute suppurative mastoiditis.
2. Infective sinus thrombosis.
3. Epidural abscess.
4. Cerebral abscess.
5. Cerebellar abscess.
6. Meningismus.
7. Acute meningitis.
8. Acute labyrinthitis.
9. Acute suppurative labyrinthitis.
10. Jugular bulb thrombosis.
11. Chronic suppurative otitis media.
12. Loss of hearing.
13. Acute articular rheumatism.
14. Acute nephritis.
15. Heart pathology.

*Treatment:*

(a). General:

1. Rest. This does not mean absence from school or business, but absolute rest in bed, thereby lessening fatigue and excitement. Further, it protects the body from changes in the peripheral temperature which are quite essential in upper respiratory and aural condition.

2. Free catharsis.
3. Light, easily digested foods.
4. A well ventilated room to lessen any nasopharyngitis.

(b). Local:

Non-operative. By this is meant the management of the case without drum incision. In a few cases, when seen early and a middle ear infection is present, abortive treatment should be tried. It is proper in those cases only in which there are no evidences of pus retention in the middle ear cavity.

1. Put the patient in bed. Avoid any change of temperature to the body if possible. Do not permit children to run about in cold rooms and upon cold tile bath room floors barefooted.
2. Give castor oil in a large dose. It has a favorable influence upon tympanic lesions.
3. Light or liquid diet.
4. Some internal medication for pain, when indicated.
5. Phenol, three to ten percent, in glycerine warmed is comforting to the ear and may be of benefit.
6. Shrinking of the soft tissues about the pharyngeal opening of the eustachian tube with a cocaine-adrenalin spray or mentholated adrenalin oil and instilling into the posterior nares through the nose, a non-irritating astringent antiseptic silver solution every two or four hours. A freshly prepared ten to twenty percent argyrol solution has served best, in my experience. However, of late I have used neo-silvol in like strength and seem to secure the same results. The neo-silvol stains less. I am convinced that cases that would have gone to suppurative middle ears have been aborted with this treatment.
7. Partly filled hot water bag to the affected side is comforting.
8. If pain and temperature continue for a few hours one should expect to resort to surgery.

*Surgical Treatment:*

Operative or surgical treatment of acute otitis media. By this is meant the management of the case by drum incision.

When the middle ear infection has progressed to that stage where there is definite bulging of the drum membrane and obliteration of the normal landmarks one can be sure that there is infected serum or pus retention within the middle ear and it is clearly a surgical condition.

Local treatment resolves itself into two basic facts:

1. The necessity of establishing free drainage of the middle ear by means of an incision in the drum membrane.
2. The necessity of keeping the external auditory canal as free of pus and exfoliated debris as possible.

1. *The Incision or Myringotomy:*

- (a). The type of knife used should be the one best suited to the operator.
- (b). The operation is exceedingly painful and not without danger. Therefore it should be done under a general anesthetic. Nitrous oxide or ethyl chloride is the ideal drug. It provides a safe drug and the anesthesia is sufficiently prolonged to provide ample time to incise one or both ear drums with deliberation and care.
- (c). If the pus is confined to the lower half of the middle ear, the incision should extend from the attachment of the posterior inferior segment below to the posterior fold above. If the whole drum bulges and all landmarks are gone the incision should begin in the posterior inferior segment below and extend through the posterior fold so that all recesses of the middle ear will be drained. A mere puncture of the drum membrane will relieve the pressure pain but does not provide adequate drainage. It is more apt to result in a permanent perforation than a free incision. It is evident that a hernia of some of the mucous folds can occur more easily and prevent drainage.
- (d). Removal of the blood clot following the myringotomy. A blood clot will nearly always form at the site of the incision. This should be gently wiped away as it will block drainage.

2. *Cleanliness*—Keeping the external auditory canal clean.

The aim is to keep the canal open for escape of infected serum and pus which comes from the middle ear. Antiseptic drugs instilled into the canal do not reach the original focus of infection and are therefore out of place. If used, unless they are very mild they will probably do harm in that they favor tissue disintegration. This is especially true of bichloride of mercury. If used the excess must be wiped away.

The best procedure is to gently mop the canal with small cotton-tipped applicators. A tooth pick makes the best as it is light and if a child suddenly jerks away the applicator can be released from the operator's hand and in its lightness no harm to the canal or drum ensues. Mopping should be done as frequently as the canal fills. This procedure is difficult to carry out in the home. However, most mothers can be taught and children, as a rule, like the canal swabbed when they learn that the operation is painless.

It has been said that peroxide of hydrogen may cause a spread of the infection by its evolution of gas. I have never seen such an occurrence. My routine is to instill a few drops of peroxide of hydrogen into the canal a few minutes before irrigation to dissolve the thick mucous and pus.

Irrigate the canal with a warm weak salt or soda solution. This alkaline solution dissolves

and cleanses the canal of pus better than antiseptic solutions.

Mop all the excess out of the canal with a fluffy cotton-tipped applicator.

Leave the various dyes in their container. No one can tell what is going on in the canal or about the drum for six weeks or more after one of the dyes has been instilled. They likely never get through the drum incision and consequently do no good. There may be benefit derived from the use of alcohol, or a two percent phenol in glycerine in the external auditory canal and I prescribe such medication at the terminal stage of the discharge.

In contrast, however, I desire to emphasize the importance of post nasal treatment. This is essential from the beginning of and throughout the attack. In adults it can be done by topical application. In children the mucous membranes of the nose should be shrunk with a weak cocaine adrenalin solution or mentholated adrenalin oil and the non-irritating antiseptic dropped into the nose with the child in the following postural position, namely, lying upon the back, the head extending over the side of the bed and flexed backward until the position will permit the solution instilled to run to the roof of the nose. This should be done as often as every three or four hours. I use a prescription of equal parts of adrenalin inhalant in olive oil, followed in twenty minutes with a ten percent neo-silvol.

If but one ear drum has been incised or spontaneously ruptured and during the attack there is a sudden rise of temperature, one may feel reasonably sure that one or two things has happened. First, that the good ear has become involved or second, that the opening in the diseased ear has become clogged with pus and debris. The usual condition is an involvement of the good ear.

The above outlined treatment is not a cure-all. In these cases the patient should be under observation as a development of surgical mastoiditis is the natural complication that can be expected. If temperature continues with an up and down curve, tenderness begins or persists over the mastoid area, the patient shows general physical signs of prostration and systemic illness, a surgical mastoid can be reasonably diagnosed.

## PHYSICIANS AS CREDITORS

WILLIAM A. DOEPPERS, M.D.  
INDIANAPOLIS

You hardly can pick up a newspaper or a periodical these days which does not contain some well rounded-out article on the subject of credits and installment buying or some reference thereto. These articles are treatises on present day methods of marketing merchandise. They show that within the past twenty years the whole scheme of production and marketing has changed radically—that ninety-five percent of the commerce of the country is marketed on a credit basis. These articles are carefully prepared by skilled hands—



men of learning and experience who are acquainted with the economic changes which this country has undergone within this past score of years.

Yet how strange it is that you never read or hear discussed the part the medical man is taking in this shifting of business methods. The doctor, particularly in the past, has not considered himself a business man, nor his profession as a business. Notwithstanding this thought on the part of some of the doctors the practice of medicine is not wholly humanitarian. There is the decided business side to the practice of medicine, for the doctor must obtain his livelihood from the financial returns from his work and obtain sufficient funds to enable him to rear and educate his family according to certain social standards and permit him to extend his scientific training and education.

Individually the doctor is obliged to recognize a system of credit among business men because of the necessity for him to buy various commodities for the conduct of his profession, and for his personal livelihood and comfort, yet he thinks he is not in a position to market his own product (pardon the expression) in keeping with any other branch of business or industry. Are we, as doctors, willing to stand by for a longer period and permit such a condition to exist? Is it not time that we assert ourselves and demand that we be recognized as business men, entitled to participate in modern methods of handling the business side of our profession?

It is an extremely practical, work-a-day world in which we are living, and those who would live efficiently must be practical. This is an age of constant changes, and any who do not keep abreast of these changes is like the sailor who refuses to adjust his sails to changed winds. A great editorial writer recently said, "Irregular things now happen regularly." In this day of specializing the wise business man no longer depends upon his own resources for determining credit risks. He relies upon special organizations for that just as he depends upon his banker for his finances, upon his architect and contractor for building plans, etc. Ordinarily the doctor does not rely upon anyone but himself in regulating his credits. He simply credits everyone who comes along, without any investigation, with the unpleasant results that many times the account for his services rendered is never paid, and not given any consideration except that it makes the debtor a knocker rather than a booster for the physician who has kindly and considerately extended credit. Please understand that I am not talking about charity. Charity is all right, and every one of us is willing to contribute and does contribute liberally to real charity. However, the fellow who can pay and will not just because it is a doctor's bill is the one who should be forced through a system of credit interchange to pay a legitimate doctor's bill.

We men of professional training always have emphasized the great ideal that, "Man does not

live by bread alone," to the exclusion of the practical thought that men will not live long without bread. The old theory that a professional man should not give consideration to the pecuniary side of his practice is bringing about an economic condition that threatens the very physical existence of the doctor and his family. It does not matter about our altruistic theories, the fact remains that, "Self-preservation is the first law of nature," and nature expects medical men to act intelligently in the matter of economic preservation. Slowly but surely the whole medical profession is coming to realize that there is something wrong about our attitude toward the business or commercial side of our work. This is evidenced by the following quotation from the report of the Judicial Council of the A. M. A. at the Dallas session: "The honest and competent physician who is interested in maintaining honored traditions, and who is in the practice of medicine as a profession, should receive such compensation for his services as will enable him to maintain himself and his family in comfort and to make provision against the time when he cannot keep up professional activities."

We are primarily professional men and not skilled in the art of commercial thinking, planning and executing. The purely commercial side of our profession is one we have always shrunk from tackling in a practical and effective way. The truth of the matter is that we, as doctors, are living in the horse-and-buggy age, so far as the administrative side of our practice is concerned, and we have not kept pace with the development of modern business methods. We still are trying to operate as individualists, each complete in himself and striving to function efficiently without any regard as to how our endeavors fit in with modern tendencies and customs.

A step in a new direction is under way in various parts of this country. Business men are organizing credit bureaus to help the profession. Such an organization should offer to our profession a complete business service that only men who are specialists in the matters of credit extension, collection of accounts, business counsel and advice, etc., are qualified to furnish. The men back of such bureaus should be known to be thoroughly reliable and capable, and to understand the ethical angle of the medical profession. Such a service should be under the direction and advice of members in the medical profession and should merit the unqualified support and endorsement of the really progressive and forward-looking doctors.

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## SPECIAL ARTICLE

### NEWS NOTES FROM INDIANA UNIVERSITY

The second semester of the Indiana University School of Medicine opened with registration and enrollment February 1st. The first semester closed January 26th.

Activities at the James Whitcomb Riley Hospital for Children have been recorded in a one-reel film in answer to the demands of many clubs, lodges and other organizations seeking an entertainingly instructive feature for their programs. The films can be obtained on request through the Bureau of Visual Instruction of the Indiana University Extension Division at Bloomington. One print is being used by the two nurses from the Robert W. Long Hospital, who are doing field service under direction of the Extension Division.

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In connection with the Clinic in Infant Feeding being conducted at the Riley hospital twice a week, the Social Service Department and medical staff are co-operating, by agreement with the Indianapolis Board of Health, in an intensive survey of nutritional conditions among children in a large area of the city near the Indiana University medical center. A house-to-house survey is being conducted by members of the Social Service Department of the School of Medicine, with the aid of students of social service in the department. The economic status of each home is carefully checked, not only to determine the relation of income to nutritional problems, but also to avoid giving any free aid to families who can employ a physician, or intruding on the work of family physicians. Mothers who are interested come to the Riley hospital where, in the special diet kitchens, they are instructed in the preparation of infants' and children's diets, and are supervised in doing the work themselves until they learn how. Student dietitians also give home instruction. Pediatricians on the medical school staff assist in checking up the health of the children. Officers of the medical school are interested in sponsoring the project chiefly from the viewpoint of its educational value to the students. Both the Social Service Department and the hospital dietetic courses are under supervision of the School of Medicine, and students in these departments are being given an opportunity to gain much practical experience. The feeding clinic is also proving to be a valuable feature in the instruction of medical students and internes.

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At the regular monthly seminar of the School of Medicine, January 14th, Dr. LaRue Carter, associate in mental and nervous diseases, and Dr. Francis C. Smith, chief resident pediatrician of the Riley hospital, reported on a case of lethargic encephalitis, somewhat atypical, with recovery. Dr. Alfred O. Adams, chief resident physician of the Riley, presented cases of congenital deformities, followed by a discussion of autopsy findings and specimens from an unusual case of multiple congenital defects occurring in the Riley service. Dr. Harold N. Trusler continued his presentation of findings and conclusions in a research study to determine the pathology and conduct of cases of intestinal obstruction, with a discussion of cases tending to support his findings

by Dr. Willis D. Gatch, professor of surgery. Dr. Lewis N. Ashworth, chief resident physician of the Robert W. Long Hospital, presented a case of toxic eclampsia, and explained the method of removal of a paraffin mass from the bladder of a Long patient by non-surgical means. B. B. Turner, Ph.D., professor of biochemistry and pharmacology, used an ingenious set of card board models and building blocks to explain the structure and shape of crystals, in a talk on, "How Nature Builds." A number of physicians not members of the staff responded to the invitation to attend and also join in the social hour which followed. The February seminar is scheduled for Friday, the 25th, at 8:00 p. m., at the Medical School Building, 1040 West Michigan street.

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Dr. Frank M. Gastineau, associate in Dermatology and Syphilology in the School of Medicine, has moved his office to Room 612, the Hume-Mansur Building. He has until recently been associated in his specialty with Dr. Frank W. Gregor, clinical professor of Dermatology and Syphilology.

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Mrs. Ethel P. Clarke, R. N., director of the Training School for Nurses of the Indiana University School of Medicine, was elected president of the Indianapolis Public Health Nursing Association at the annual meeting January 14th. This organization is offering hourly nursing service for pay cases, in addition to free service for the poor. The visiting nurses' schedules are arranged so that the pay cases can be taken with the others, with some reduction in cost, where constant attention is not required.

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A new member on the joint executive committee of the Riley Memorial Association, which acts in an advisory capacity to trustee of Indiana University in the administration of the James Whitcomb Riley Hospital of the School of Medicine, is Peter G. Reilly, Indianapolis, president of the Republic Cresoting Company. At the annual meeting of the Riley Memorial Association, January 12th, directors re-elected were Dr. Carleton B. McCulloch, James W. Fesler and Dr. Lafayette Page, professor of Rhinology, Otology and Laryngology in the School of Medicine.

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Indiana University School of Medicine seniors make up twenty-eight out of the thirty successful candidates for interships in the Indianapolis City Hospital beginning next July. Four alternates are also I. U. men. There were about sixty candidates, selected by appointments by the city Board of Health. Written examinations were not conducted this year. Those appointed, including two from the University of Louisville Medical Department are: James L. Bartle, Bloomington; Eugene Williams, Dale; Alfred R. Robbins, Rochester; Russell A. DeMott, Odon; Paul G.



Iske, Indianapolis; Norman M. Beatty, Indianapolis; Paul R. Leathers, Indianapolis; Byron K. Rust, Indianapolis; W. G. Morgan, Louisville, Ky.; Clifton G. Follis, Adolphus, Ky.; Thomas J. Walsh, Bedford; Samuel W. Litzenberger, Middletown; Waheeb S. Zarick, Indianapolis; Roy A. Geider, Indianapolis; Frank Ramsey, Terre Haute; Ferris W. Langston, Windfall; John P. Lordan, Joliet, Ill.; Paul E. Williams, Martinsville; Paul R. Weeks, Indianapolis; Floyd E. Wolfe, Indianapolis; Albert M. DeArmond, Redkey; Ethelbert R. Wilson, Indianapolis; Howard H. Miller, Indianapolis; Truman Bennie, Linton; Charles Earl Smith, Evansville; R. W. Baeseman, Louisville, Ky.; Leonard L. Nesbit, Princeton; Lester H. Quinn, Flora; Edgar E. Hunt, Terre Haute; Walter S. Fisher, LaFontaine. Alternates: Fred A. Kennedy, Valparaiso; Homer L. Warrick, Bloomington; John W. Graves, Corydon; Ernest K. McLean, Indianapolis.

New members of the Indianapolis Board of Health to succeed Sol Schloss and Dr. Goethe Link, resigned, were appointed January 19th by

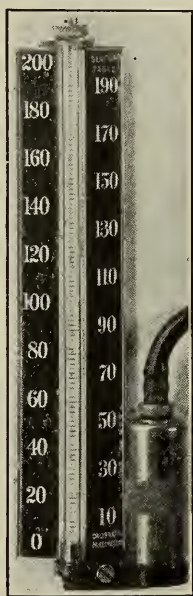
Mayor John L. Duvall. They are Dr. W. E. Mendenhall, a graduate of the Indiana University School of Medicine, and Dr. E. E. Padgett, associate in Surgery in the School of Medicine.

A course of six extension lectures in medicine is being given at Muncie by members of the Department of Medicine of the Indiana University School of Medicine, before the Delaware County Medical Society. The course and the topics selected were at the invitation and suggestion of the Delaware county physicians. Topics and speakers are: "The Therapy of Syphilis and Its Complications, and Medical Dietetics," Dr. Charles P. Emerson, dean of the School of Medicine; "The Present Status of Physical Therapy, and the Uses and Disuses of Physical Therapy," Dr. Edwin N. Kime, associate in medicine; "The Therapy of Cardiac Diseases," Dr. George S. Bond, associate professor of medicine, and "The General and Specific Treatment of Lobar Pneumonia," Dr. L. G. Zerfas, associate in medicine. The last three meetings will be in the order of topics named on February 18th, February 25th and March 11th.

C. R. MACDONNELL.

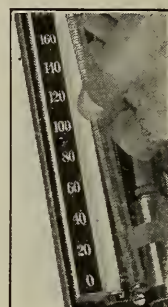
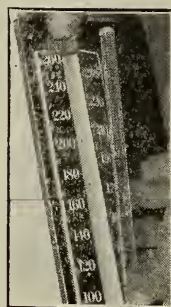
#### A NEW SPHYGMOMANOMETER

A new mercurial sphygmomanometer, in which several important objections to this type of instrument are overcome, is described by J. L. Wilson, M.D., and H. N. Eaton, A.M., in the November 20, 1926, issue of the *Journal of the A. M. A.*, page 1742. It has no cemented joints, and other common causes of mercury leakage and glass breakage are eliminated by the use of a simple, straight glass tube, held in a resilient mounting



which enables the tube to withstand shocks which would otherwise shatter it. Severe tests have proved the sturdiness of the new construction.

The tube is so mounted that it can be removed (as for cleaning) by a simple pressure of the thumb, and replaced with equal facility. Thus, if the glass tube should break, the user can quickly insert a new one himself without having to return the instrument to the manufacturer for repairs.



The insertion of a new tube does not impair the accuracy of the instrument. Each steel reservoir is an exact counterpart of the master steel reservoir against which each tube is individually calibrated. Therefore, the scale, which is separately engraved on each tube, is identically accurate for any instrument of this new type.

The design of the instrument (made by the W. A. Baum Co. of New York) was developed along the lines of maximum service and convenience to the user, without the sacrifice of simplicity and ruggedness, which experience has shown to be so desirable in instruments of this character.

## THE JOURNAL of the

*Indiana State Medical Association*

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.  
Editor and Manager

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## EDITORIALS

### SOME CAUSES OF CATARRHAL DEAFNESS

It is unfortunate that it is not more generally recognized that catarrhal deafness, whether it occurs in children or adults, more often is caused by nasopharyngeal pathology than by anything else. In children, adenoid tissue is a causative factor in the production of deafness, and catarrhal deafness in adults often can be traced definitely to adenoid tissue and its sequellæ that have been prevalent from childhood. However, much of the catarrhal deafness in adults also may be due to bulbous or hypertrophied ends of the inferior turbinates which, because of the irritation produced around the nasopharyngeal orifices of the eustachian tubes, sets up an inflammatory and adhesive process in the tubes and middle ear cavities. Unfortunately much of the causation of this type of deafness does not receive appropriate attention.

Practically every general physician has his whirl at the removal of adenoid tissue, and there isn't one out of ten of them who does the work very thoroughly or with the slightest consideration of what really should be accomplished through the eradication of all adenoid tissue and especially that which is in the region of the orifices of the eustachian tubes. In later life all sorts of treatment except the right treatment is instituted for the relief of the tubal tympanic catarrh, but without taking into consideration the actual cause of the trouble.

Another thing of importance is the question of diagnosis in impaired hearing, and here not a few men posing as specialists fall down, for they either do not carry out a comprehensive system of functional tests of the hearing, or if functional tests are made, the examiners do not understand or interpret the findings properly. In consequence many a case of disturbance of the sound perceiving apparatus is douched and sprayed and catheterized without giving the patient the slightest relief and oftentimes making him very much worse. Therefore, a plea for more accurate diagnoses is as important as a plea for appropriate treatment of some of the causes of impaired hearing, and in particular that type of impaired hearing which is due to disturbances caused by pressure or irritation of the nasopharyngeal openings of the eustachian tubes by adenoid tissue and hypertrophied turbinates.

### USE OF "DROPS" IN FITTING GLASSES

The oculist often is asked, "Why do you use drops in fitting glasses?" We are ashamed to admit that the question sometimes comes from physicians who should know better. We also are ashamed to admit that there are many general physicians who actually advise their patients to consult opticians or even itinerant spectacle vendors because such men do not use drops in fitting glasses. This is a sad commentary upon the intelligence and fair-mindedness of members of the medical profession. It also does not speak well for the confidence placed in oculists by their confreres in general practice.

Every physician is more or less familiar with the fact that changes of focus require accommodation, and that accommodation is accomplished without any appreciable effort or strain when the eye is of normal shape. However, so many eyes are not of normal shape, either being too short or too long, and in consequence nature has to make up for this defect through the over action of the ciliary muscle in accommodation, and the persistence in this unnatural effort produces a spasm of accommodation so often that we know that not infrequently artificial error is created which only an appropriate lens will correct. Thus a far-sightedness may be converted into an apparent near-sightedness, and if by subjective means only a lens is prescribed that gives the most distinct vision, a mistake would be made and the patient suffers in consequence. Inasmuch as we never can tell with certainty when such a condition exists, the only way to determine the facts, or in other words, to determine accurately the normal refraction of the eye, is to paralyze the ciliary muscle and thus reduce the eye to a perfectly normal condition unaffected by accommodation. The static refraction then can be determined with absolute accuracy by both subjective and objective tests, each of which should tally with the other. Another advantage in using the cycloplegic is that the ophthalmologist, by means of the ophthalmoscope and retinoscope, is able to measure the refraction accurately, independently of the patient's answers to questions, and of still more importance is the possibility of examining the interior of the eye for pathological changes which might escape if the examination were made otherwise than with a fully dilated pupil.

Suspension of the accommodation frequently prevents one from prescribing glasses which are too strong, a practice all too common with the so-called optometrists or opticians. The prescription for glasses will depend entirely upon the findings, and a number of other features that have to be taken into consideration, such as the health of the individual, his temperament, the amount and kind of refractive error, and the character of work that he is doing. When and how to use drugs must, of necessity, be left to the members of the medical profession who are skilled in their use, and any reputable oculist understands the



conditions that offer a contraindication for the use of drugs. The determination of the error is not a simple matter, but when this determination is made with accuracy it often leads to the prescribing of glasses that will relieve whereas glasses prescribed by inexact methods do not relieve. Furthermore, accuracy in determining the refraction of the eyes often does away with the necessity of wearing glasses that have been prescribed for a supposed error that does not exist. We may conclude by quoting the words of a well-known oculist\*, "The use of a cycloplegic substitutes knowledge for guesswork. It frequently shows that glasses are not necessary. It enables one to report to the family physician with more certainty to what degree eyestrain may be a factor in producing the symptoms."

### INSULIN TO IMPROVE SURGICAL RISKS

Insulin has done wonders in improving the surgical risks among diabetics. This is particularly true in the practice of ophthalmologists who so often are called upon to operate diabetic cataracts and who hesitate on account of the risk involved. Since the advent and general use of insulin it has become possible to make the diabetics sugar-free long enough to do away with many of the risks incumbent upon operation upon a diabetic cataract. This in itself is a very great boon to humanity and is only one of the many valuable features connected with insulin treatment. However, we should oppose the opinion expressed by some blind enthusiasts that diabetic cataract and diabetic hemorrhagic retinitis may be cured through the administration of insulin. There is absolutely nothing to indicate that this very desirable result can be accomplished.

### APPROVED CLINICAL LABORATORIES

The A. M. A. has found 138 clinical laboratories that are worthy of being placed on the approved list. The work involved in checking up these laboratories has required three years of time. So far only four laboratories in Indiana have been approved, and they are one each in Fort Wayne, Indianapolis, Lafayette and South Bend. Undoubtedly there are other laboratories in the state that deserve to be approved and will be approved later.

The essentials of an improved clinical laboratory, as adopted by the American Medical Association, are given in a circular which anyone may obtain. Briefly stated, the requirements are that a clinical pathologic laboratory shall be an institution organized for the practical application of one or more of the fundamental sciences by the use of specialized apparatus, equipment, and methods for the purposes of ascertaining the presence, nature, source and progress of disease in the human body. Only those clinical laboratories in which the space, equipment, finances, management, personnel and records are such as will insure honest,

efficient and accurate work may expect to be listed as approved. The director of an approved clinical laboratory must be a graduate of an acceptable college or university of recognized standing, and he shall have specialized in clinical pathology, bacteriology, pathology, chemistry or other allied subjects for at least three years. He must devote his entire time to the laboratory. None but the director, who is a licensed physician, is expected to make reports containing diagnoses and prognoses. Approved laboratories must keep complete records of all work done, together with specimens examined, and shall not be guilty of publicity that is not in professional good taste, nor should any announcement contain misleading statements, or claims of unusual superiority. It should not advocate medical fads nor lay undue stress upon the importance of laboratory findings. Advertising should go to physicians and never to laymen. No approved laboratory will divide fees, or rebate between the laboratory or its director and any physician, corporate body or group. The most important factor in any clinical laboratory naturally is a well-qualified medical director, but even he must conform to approved ethical standards.

*The Journal of the A. M. A.* will not take advertising from anything but an approved laboratory, and there is a movement on foot to have the state journals do likewise. We feel disposed to follow the example set, although we expect to give a sufficient time for the laboratories of Indiana to get on the approved list. This matter of approving laboratories is so new that a little time must be given the plan for co-operation of those who can meet the requirements.

### DOCTORS AS BUSINESS MEN

An officer of a large trust company informed us the other day that he was amazed to discover that many physicians with large practices have failed to accumulate anything and have not established a credit that is in keeping with their years of service and position in the community. He named several prominent physicians, who, he said, ought to be rated as worth not less than \$50,000 each, but who evidently possessed no tangible property of consequence and whose credit was so precarious that no banker would think of loaning any one of them more than a few hundred dollars and even then would make the loan more on the general reputation and integrity of the doctor than upon the real tangible security offered. His explanation of this condition of affairs was that the average doctor has no business training nor business sense, and that in failing to adopt business methods in his work he not only harms himself but his patients as well, for he encourages patrons to take advantage of laxity.

As a concrete example of a doctor's indifference to business methods, the trust officer said that he himself had requested his family physician to send a bill on the first of the month for any and all

\*Wells, *Boston Medical and Surgical Journal*, October, 1926.

services rendered, but that it required very urgent solicitation on more than one occasion to get a bill at the end of six months or a year. Is it any wonder that such doctors do not accumulate anything, have no credit, and really deprive themselves and the members of their families of comforts and luxuries that could be afforded if more attention were given to the business side of the practice of medicine. Isn't it about time for the medical profession as a profession to line up with some good business organization like an approved and responsible collection agency, or some business bureau, in an endeavor to have the economic side of the practice of medicine given appropriate attention. We haven't very much faith in the average collection agency, but we do think it would be possible for some bank or trust company to establish a collection agency that would be thoroughly trustworthy and that would do the work in an efficient and satisfactory manner. Such a collection agency need not be connected with any bank or trust company providing it is backed by adequate security. The average medical man needs a business manager, and on the whole we think that he and his patrons would profit if he engaged a business manager, providing the right sort could be secured.

#### THE WOMEN'S AUXILIARY

Heretofore we have not been very favorable to the effort to organize and keep alive what is known as the Women's Auxiliary of the Indiana State Medical Association, but since giving the subject more thought we are inclined to believe that there is a place for such an organization and we are quite willing to urge the wives of the doctors of Indiana to take an active interest in making it a force for good. The members of this auxiliary, taking their cue from their husbands, can do much to stop the everlasting exploitation that is going on before various women's societies by food faddists and medical pretenders of every description. For instance, under the guise of child welfare we are having certain faddy dieticians, and preachers of physical culture like the McFadden outfit, commercializing their wares before women. All of this could be stopped to a very large extent through the influence of the wives of medical men if organized in what is commonly known as the Woman's Medical Auxiliary. Furthermore, the women of such an organization could do a great work in educating their sisters in the parent-teachers' clubs, women's clubs, and other like organizations. So all in all we are quite in favor of the Women's Medical Auxiliary as a piece of constructive organization that will go far towards solving some of the problems of rational medicine.

#### SPEAKER FOR THE HOUSE OF DELEGATES

Several state medical associations are adopting the plan now in force in the American Medical

Association of having a Speaker for the House of Delegates. It seems to us that this is an excellent plan and well could be adopted in Indiana. The man who presides over a legislative body should be thoroughly schooled in parliamentary usage and one who in reality is a good presiding officer. Some of our presidents have been excellent presiding officers, whereas others have been dismal failures. One or two of them have been absolutely helpless and hopeless when some sort of a parliamentary tangle was brought about through a scrap on the floor of the House. They not only looked helpless but they acted helpless, and in their desperation they had to ask the secretary and some others just how they should decide certain questions, and many times they did not decide the right way at that. All of this sort of confusion and dissatisfaction would be prevented and much time would be saved if we had a Speaker who is well-versed in parliamentary usage and who is a recognized good presiding officer. We offer the suggestion that the Indiana State Medical Association take into consideration the advisability of having a permanent Speaker of the House of Delegates. It will relieve the president of very objectionable duties, and at the same time add to the dignity of his office.

#### EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital. We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

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We want THE JOURNAL to serve you.

DR. W. S. MIDDLETON, in the November number of the *Wisconsin Medical Journal*, reports a case in which sauerkraut cured persistent vomiting. That is one use for sauerkraut that had not occurred to us.

EVERY month our exchanges are generous in quoting from THE JOURNAL, but occasionally a medical journal quotes without giving credit. Perhaps we get more credit in this world than we deserve, but, anyway, we like to have what is our due.

THE Council has approved the scheme for holding a county medical society secretaries' annual conference, and will sanction the holding of such a conference to precede the next annual session of the Association. It is hoped that every county medical society secretary will arrange to attend.



It is fortunate that the question of having high school athletics supervised, insofar as health is concerned, by medical men, is a step in the right direction. We are very glad that the Indiana State Medical Association had a voice in the plan that was proposed and accepted by the sponsors for high school athletics.

IF you haven't paid your dues when you read this editorial note, then do not kick if you fail to receive the next number of THE JOURNAL, nor if the Association refuses to defend you if you have a malpractice suit based upon services rendered since the first of this month. Procrastinators usually pay heavily for their carelessness.

COMPLAINT has been made that there is too much "hot air" in the papers and discussions presented before our State Medical Association, and that an effort should be made to have more practical work offered at the next session. It is not at all unlikely that at the next session there will be clinics and a variety of scientific demonstrations that ought to hold those in attendance until the final adjournment.

THE Council is urging the Committee on Arrangements, and especially the Program Committee, to make some plans whereby there will be less tendency on the part of members to hurry away from the Friday morning meeting of the next session of our association. To this end it is barely possible that arrangements will be made for a general meeting on Friday morning instead of the customary section meetings.

WE are pleased to note that the article on medical ethics, written by the late Dr. George F. Keiper, of Lafayette, and published in THE JOURNAL has been appreciated sufficiently outside of Indiana to justify its republication in some of the state medical journals. Thus the *Journal of the Medical Society of New Jersey* has printed Dr. Keiper's article in two separate numbers, and several medical journals have printed rather long abstracts of the article.

RECENTLY we learned that one state medical association had dues of twenty-five dollars per year, and that out of this amount fifteen is held in reserve for medical defense. Some of the Indiana doctors kick like army mules because of the small dues they have to pay, and yet they get about twenty-five dollars' worth of service for every dollar paid in dues, and the dues for a year don't amount to as much as the price of two tickets to a good theatrical performance.

WHILE under a general anesthetic given for a tonsil and adenoid operation, an eight-year-old boy, without being told that it was to be done, had a circumcision by a surgeon. Subsequently he was more annoyed and uncomfortable as a result

of the circumcision than he was as a result of the tonsil and adenoid operation, and while talking with a little neighbor girl playmate who was about to have a tonsil and adenoid operation, he exclaimed, "You'll be surprised to find out where your tonsils are!"

ABOUT eight hundred doctors of Indiana are Fellows of the A. M. A., but the number ought to be three times that. *The Journal of the A. M. A.* alone is worth twice what it costs for Fellowship, and any doctor ought to be proud to be listed as a Fellow of the largest, most influential and best medical association in the world. Furthermore, there are many perquisites that go with fellowship in the A. M. A. that are well worth considering by the progressive medical man, not the least of which is the honor of fellowship.

Recently we were offered a paper for publication in which the suggestion was made that every doctor could do his Wassermanns, and that any office girl is capable of making the interpretations. We objected to the publication of the paper on the ground that the teaching is vicious in every particular. Already we have too much untrustworthy laboratory work with which to contend, without turning such work over to gum-chewing office girls and untrained doctors who attempt to do everything under the sun without doing anything well.

IN a conversation with the health commissioner of Chicago we learned that Chicago not only has clean milk instead of "cleaned" milk, but that the health department insists upon having all milk delivered in Chicago come from tuberculin tested cows and, as a further precaution, that it is pasteurized. We take our hats off to the health commissioner of Chicago who cannot be deterred from the straight and narrow path of duty by the abuse of newspapers or commercial interests. He believes in promoting health in every possible but consistent way, and he doesn't let any one deter him from carrying out that sort of a policy.

WE notice that several state medical societies are obtaining group life and health insurance for their members. We never have been very keen about this group insurance idea, inasmuch as in most instances the insurance is granted without examination, and to our notion that is economically a bad practice, for it stands to reason that the poor risks are the ones that get the long end of the deal, and it is the good risks that are paying for the poor ones. Some of the insurance companies have been talking group insurance for the members of the Indiana State Medical Association, but we believe it would be a good plan to look before we leap.

SOME of the Indiana doctors seem to think that the present legislature will so amend the Wright

Bone-Dry Law that they will be permitted to prescribe alcoholic beverages. We cannot get enthused over this proposal, and especially in view of the decided improbability of getting the present Indiana legislature even to give the subject a passing thought. It isn't necessary for a physician to prescribe alcoholic beverages in Indiana in order to have his patients secure the benefits of an alcoholic stimulant, for liquor, good, bad and indifferent, easily may be obtained in any section of Indiana, so why worry about the question of prescribing it?

DR. PETTIT, of the Mount Wilson Observatory, says that this year the sun will show more spots than ever before and that this means an increase in ultraviolet rays of the sun which cause sunburn. Face lotions ought to be more popular this year, but, aside from this, if there is any virtue in the theories that ultraviolet rays have a wonderful effect in counteracting infection and promoting health, then this year ought to be a particularly healthy year. Those affected with tuberculosis, and especially those affected with skin diseases, ought to profit by spending considerable time in the open if the ultraviolet rays of the sun are to be especially increased in quantity and quality.

It is hoped that the committee appointed by the American Medical Association to confer with representatives of the American Bar Association concerning expert opinion evidence will result in some much needed reforms in the matter of expert medical evidence as submitted in court. At the present time expert medical testimony is thought by the public to be largely worthless through the conflict of opinions that seemingly are biased as a direct result of the fees paid by those who employ the witnesses. Undoubtedly there is much truth back of this opinion, and we sincerely hope that there may be a way out of it by the adoption of some plan whereby unbiased expert evidence can be procured by the court.

As a matter of curiosity we would like to know just how many Indiana doctors subscribe for *Hygeia*? Hands up! If you cannot put up your hand as representing an honest answer, then for heaven's sake sit down at once and make out a subscription to *Hygeia* and send it to the A. M. A. office. *Hygeia* is a journal of individual and community health for lay people, though there is much in it that is valuable to the medical man. Aside from all this, the fact that the lay public is receiving trustworthy information concerning health and how to keep it is of direct value to the medical profession, and therefore the medical profession ought to support a journal of that character, and particularly when it is owned and published by the great American Medical Association.

BERNARR MACFADDEN is now attacking the regular medical profession, and the American Medical Association in particular. He may think he is feathering his own nest by publishing in *Physical Culture* the announcement that syphilis can be cured by physical culture treatment, but we have an idea that he will be called to account from more than one source for such criminal advice. Incidentally, why doesn't the federal government as well as the state government prohibit the publication of these various sex magazines that are shipped by express because they cannot be shipped by mail. If a publication is too filthy or objectionable in any sense to be sent by mail, it certainly should be prohibited from being sent in any other way. It is high time that these publications that are inimical to the health and morals of the people should be suppressed.

FOR the Washington session of the A. M. A. the Board of Trustees has promised an innovation in the way of two days of clinics. So far as we know this is the first time that the A. M. A. officially has arranged for clinics as a part of the regular program. This is in recognition of the growing demand for practical demonstrations and teachings in advancing the science of medicine. In other words, we need something more than pure didactic work, and the Board of Trustees should be commended for this decision to have two days of clinics at Washington. What has been decided for Washington might with profit be adopted by the state associations. The suggestion is thrown out for what it is worth to the members of our Committee on Arrangements who will plan for the coming session of the Indiana State Medical Association to be held in Indianapolis next September.

QUITE a large number of Indiana doctors have been beguiled into taking stock in silver fox farms, on promises of great returns from such an investment. It is quite possible that a few fox farms have made some money but such instances are few and far between. It may be interesting to these doctors who seem to have money to throw to the birds to know that the Windswept Farms, of Henderson, New York, which have made such extravagant claims for distinction, and sold so many foxes all over the country, has gone broke and the liabilities are nearly one million dollars. The farm was declared bankrupt in October. Several more fox farms of less conspicuousness have gone broke, and others are on the verge of bankruptcy. Silver fox breeding is a precarious enterprise and subject to great loss from a variety of conditions. Doctors will do well to steer clear of enterprises of that kind.

GOOD laws should be good common sense, but some times our courts do not seem to exercise good common sense. As an instance of the peculiar interpretation of what is right and just, we read



that the supreme court of Minnesota has affirmed a decision whereby a machinist who was paid for the loss of an eye from industrial blindness, caused by being struck with a piece of steel, was able to collect again for the loss of the same eye when three years later the eye was injured to such an extent that the eyeball had to be enucleated. Under the circumstances, one naturally would conclude that the law should discriminate between blindness without loss of the eyeball and blindness with removal of the eyeball. In other words, according to the findings of the Minnesota Supreme Court, the presence of an eyeball, whether deformed or not, and admittedly blind, is a distinct asset to the employee.

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WE are delighted to know that through the efforts of the Bureau of Publicity of the Indiana State Medical Association, one Paul O. Sampson, of the National Health League of New Jersey, has been prevented from making his health talks before some of the dinner clubs in Indiana. Sampson attempted to get a foothold in Indiana, and had made a number of appointments for lectures, but through the efforts of our Bureau of Publicity his dates were cancelled. Again we say that those of our members who belong to dinner clubs of various kinds, and particularly to such organizations as the Rotary, Kiwanis, Optimists, Lions, etc., will do well to get in touch with our Bureau of Publicity whenever there is some person trying to get a date with them for an address upon any subject pertaining to health or disease, and find out whether such person is worthy of confidence or not.

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THE Supreme Court of the United States has upheld a decision concerning the limitation placed on whiskey prescribed by physicians. Commenting on this the editor of the *Journal of the Medical Society of New Jersey* says, "If the national government may say when and how much whiskey we may prescribe for a sick person, may it not soon arrogate to itself the determination of when and in what amount we may use quinine or any other remedial drug?" We are not strong for prohibition but we do get rather tired discussing this question of the use of alcoholic beverages as a therapeutic agent. It is questionable if there are not other stimulants that can be used to just as good purpose as alcoholic stimulants in the practice of medicine, but admitting that there is a use for good liquor, isn't the federal law quite liberal enough? Here in Indiana we do not have the advantage of even the federal law, for our state laws do not permit the prescribing of alcoholic beverages under any condition and we get along quite well at that.

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IN discussing the question of medical legislation governing the privilege to treat the sick, emphasis should be placed upon the necessity of recognizing the dependence of intelligent treat-

ment upon anatomy, physiology, pathology and diagnosis, and that a knowledge of scientific medicine is necessary before one is able to make even reasonably correct diagnoses on which all intelligent treatment is based. To license men to practice medicine when they are unable to make a diagnosis is absurd. Furthermore, when once we have established a law governing the matter of suitable requirements for the practice of medicine, there also should be provisions in the law for punishment of those who do not comply with the requirements of the law. Our present medical law is fairly satisfactory, but it becomes next to null and void through the loss of suitable provisions for enforcing it. The present legislature has been asked to correct these defects, and we sincerely hope that the legislators may be led to see the justice and the necessity of the changes that are asked.

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THE subject of periodical health examinations of the apparently well has escaped the attention of the majority of the physicians of Indiana if we can judge by all that we can hear. If there is any one way by which medical men can get closer to their patients and the public generally, and stimulate confidence, it is through the medium of periodic health examinations, and we are surprised to note the indifference concerning this matter that has been manifested by the average doctor. Of course when the enterprise has been taken over by the outside interests then the doctors will begin to complain, but up to the present time they have made no particular effort to put into effect something that is not only of the greatest value to the public, but to the medical profession as well. The American Medical Association has issued a book giving full instructions as to how these periodic health examinations are to be conducted, but we fear that the book has not fallen upon fertile ground here in Indiana and we would like to see something done to stir up a little animation concerning the subject.

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THE fact that Ontario has had a reversal of opinion concerning the temperance question and recently has voted "wet" should not be considered as indicating that the United States is going to follow the example. No matter what the opinion may be here, nor how impossible it is to enforce our eighteenth amendment, this country on paper is dry, and it will continue dry for many years to come. It is quite a different thing to change a constitutional edict instead of changing a law that may be passed by one legislature or congress and wiped out by the next. Prohibition has cost us millions upon millions of dollars in feeble efforts to enforce it, and it has been a source of profit to a great army of people who are catering to a well-developed alcohol taste. It has not been a success, and the chances for making it effective are still less now that Ontario is returning to the wet column. However, we are going to continue with

the farce because it is a constitutional decree and we shall never see the day when thirty-eight states will vote to annul it. The experience has taught the people to go slow on constitutional amendments.

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THE prohibition director for this district, located in Chicago, has been sending Indiana physicians a form letter concerning new rules governing the prescribing of liquor by members of the medical profession. According to a new rule "physicians when writing prescriptions for alcoholic beverages shall not name therein the druggist or pharmacist who shall fill prescriptions, and the physician will be held responsible for the proper examination of patients, and shall not issue prescriptions for intoxicating liquor unless in his judgment as a physician the liquor is indicated as a proper medicament for the symptoms shown by the examination, and as being necessary to afford relief for some known ailment found to exist. In every case the correct name and address of the patient must be shown on the prescription." This is a fine piece of news for Indiana physicians and only indicates what might have been. All physicians outside of Indiana, in Illinois for instance, are highly privileged characters. In Indiana we cannot prescribe alcoholic beverages, and we cannot even look at them without fear of arrest.

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WE have been bombarded with literature ostensibly showing why the United States should join the League of Nations or go into the World Court. We wonder who is paying for all of this propaganda. It is reported that our vituperative vice-president, Colonel Dawes, in commenting on the World Court, said, "We are damn well out of it," to which we say, "Amen." We entered the war to save civilization, and we certainly turned the tide that threatened to overwhelm the world. We spent an immense amount of money in the war, loaned still more to foreign nations, asked no spoils as victors, and yet today we are hated by all of the European nations because we do not cancel their debts to us and give them some more money to build up their armies and navies for future conflicts. What the United States should do is avoid foreign entanglements, mind its own business, and fortify itself on land and sea and in the air to repel any of the voracious foreigners who look at us with envy. No World Court will amount to a tinker's dam either with or without us, and we would be expected to pay the bills anyway.

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IT is the practice of some insurance companies, industrial concerns, lawyers, and even individuals to secure information if possible from the private records of physicians. Sometimes this information is used in a very detrimental way, and perhaps in the majority of instances it is not to the best interests of the patient nor is it sought as a

result of the consent of the patient. Doctors should hesitate in giving out information from their private records, for they cannot legally give this information except with the permission of the patient or when compelled to give it at the order of a court. Likewise, hospitals have no right to give out information concerning cases unless the information is given at the command of the court or after permission has been given for the publicity. Many times the information is sought with the avowed purpose of instituting civil damage suits or malpractice suits. At other times information is sought for the purpose of wreaking personal vengeance of one kind or another. Therefore, the doctor should use unusual diligence in protecting the records of his private patients from abuse.

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Fraudulent medical advertising never will be banished from the lay press until pressure is brought to bear by better business bureaus or the better class of advertisers. With most of the newspapers it is a question of dollars and cents, and they are willing to ease their consciences if money for fraudulent advertising shows up on the right side of the ledger. If one newspaper in a town tries to be decent and turns down fraudulent advertising it seems that at the end of the year that paper makes a much poorer showing than its competitors, with the result that it finds it increasingly difficult to get even decent advertising. As the director of the Bureau of Investigation of the A. M. A. well says, "It is an unfortunate fact that the advertisers of meritorious products, decent men, seem as a general thing to be concerned not at all with the wretched company in which their advertisements find themselves. Decent advertisers could clean up the situation very quickly if they would act in concert and tell newspapers that if they accept advertising that tends to break down the readers' confidence, which all fraudulent advertising does, then they, the decent advertisers, will refuse to use such publications."

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THERE are many perils in the path of the woman who tries to reduce. A writer in *Liberty* well says, "Strenuous weight reduction, whether by violent exercise, starvation, or an ill-advised diet, or with the aid of sure-thing drugs, may give you a skinny ideal, but it also will make you scrawny, sag your skin, spoil your complexion, make you prematurely old, and, more, to the point, make you *look* old. Less important from the feminine viewpoint, perhaps, such reduction methods may run you into anemia, tuberculosis, chronic indigestion, kidney trouble, and other organic upsets. Even death is a real possibility." Medical men have been preaching against the reducing proposition, but it remains for the Paris dressmakers to change the practice of the women who thought that slim and sylphlike figures were stylish. At the present time the Paris dressmakers are designing costumes which call for figures with



more curves, and with a modest display of hips and busts, so perhaps what doctors could not accomplish through their recommendations and advice the Paris designers can bring about in the twinkling of an eye. The average woman will go to any extreme, even to sacrificing her health, in an attempt to be fashionable.

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IF persistence counts for anything, the long fight to have this country adopt the decimal weights and measures system for merchandising ought to win out. Certainly it would be a tremendous convenience if all nations made use of uniform or universal commodity quantity units, and right now, when the United States is looked upon as the most powerful and the most influential nation in the world, we could adopt such a system and in all probability most of the other nations would follow. The decimal metric system of weights and measures has much to commend it, and while at first there would be some confusion and misunderstanding, yet our people soon would become accustomed to the new system and it would go far toward stabilizing business activities, and even create uniformity in the weights and measures of the United States itself. The decimal system can be mastered easily and multiplications and divisions are accomplished instantly by shifting the decimal point. We are much in favor of this change as it would give us a precise and unvarying system that eventually will be uniform throughout the world. The American Medical Association and many other large medical organizations of this country have gone on record as favoring the change.

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THE United States Army and Navy have abandoned the Wassermann test and are now employing the Kahn test as a standard procedure for the recognition of syphilis. This decision followed a comprehensive study of the value of the two tests. It may be of interest to know that the Kahn test also has been adopted by many states and not a few foreign countries. In fact, laboratories throughout the world are adopting it and using it in preference to the Wassermann test, which is more expensive and requires more time. The Kahn test is comparatively simple. The blood serum of a patient is mixed with a special reagent antigen which can be prepared readily. Within from thirty second to three minutes the precipitate appears in the mixture if the patient has syphilis. No precipitate appears if the patient is free from the disease. The antigen for this test is a stable product and can be shipped anywhere in the world without danger of deterioration. The test can be made anywhere, in tropical or Arctic regions, in the field laboratory of the army or aboard ship in the navy, and at a cost decidedly less than that of the Wassermann. Inasmuch as the Kahn test is far more dependable and accurate than the Wassermann test which is not only complex but offers sources of error, it is

thought that the Kahn test should be a standard procedure everywhere for the detection of syphilis.

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IN one single issue of an independent medical journal that circulates among medical men in Indiana we find advertised the following nostrums and proprietary pharmaceutical preparations: Tongaline, Jude's Pepto-Mangan, Sanmetto, Neurilla, Ectol, Gray's Glycerine Tonic Compound, Antiphlogistine, "Fellows" Syrup of Hypophosphites, Phillips' Phospho-Muriate of Quinine Compound, Ergoapiol, Sal Hepatica, Peacock's Bromides, Pasadyne, Cactina Pillets, Prunoids, and one or two additional specialties that are on the borderline of respectability. The manufacturers and exploiters of these preparations presume upon the gullibility of the medical profession in expecting that the preparations will be prescribed for patients. All of the preparations mentioned are marketed under false claims as to therapeutic action, or with false, misleading, and meaningless statements as to composition, or under a name which invites uncritical prescribing. The manufacturers undoubtedly believe that no combination of drugs can be too preposterous to be worth trying on the medical profession. The prescribing of such nostrums by physicians is an imposition if not a fraud on the public. It certainly is a reflection upon the honesty and trustworthiness of the physician who prescribes them. That they have any sale at all is a sad commentary upon the reputation and judgment of the medical profession. What should be said concerning a medical journal that helps to exploit the medical profession and public through false and misleading advertising wouldn't look well in print.

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AT a recent murder trial in the northern part of Indiana some reputable medical witnesses testified that there was such a thing as "episode insanity" which, according to their logic, is a form of insanity that comes on rather suddenly and may disappear suddenly, and during which a man may commit a crime. Opposing medical witnesses, also very reputable, testified in the same trial that the so-called "episode insanity" was nothing more than a plain "drunk," and there seemed to be sufficient evidence to sustain their assumption. The query may now be offered in future trials as to just how frequently "episode insanity" may cover an ordinary jag and perhaps have influence in acquitting a man guilty of crime. However, the point of interest to us is, why should there be such disparity of opinion in a criminal case? Is it any wonder that the newspapers are laughing at the medical profession because reputable medical men are on opposite sides of the fence in a discussion of such a subject as the effect that alcohol has upon the morals and actions of a man? We don't believe that there would be disparity of opinion among reputable medical men when testimony in court trials is solicited by the court rather than by

the attorneys for the prosecution or the defense. Anyway, the next time a fellow is arrested and thrown into court in any of the courts in northern Indiana we may expect him to claim that he is suffering from "episode insanity" if a bottle of hooch is back of the actions that brought about arrest. Whether the plea will get him anywhere or not remains to be seen. It did not work in the case under discussion.

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IN Chicago the automobiles speed down the boulevards at forty to fifty miles per hour. In fact if a driver lags along at twenty-five or thirty miles per hour a policeman usually says to him, "What's the matter, are you going to sleep?" If you drive that fast in some of our Indiana towns or even in the country some traffic cop will come up and say, "What's your hurry? Here's a card," and you forthwith are invited to step into a nearby court to pay a nice little fine for speeding. In cities it is absolutely necessary to keep the traffic moving rapidly or there would be an unmanagable traffic jam. It has been discovered that when the traffic is regulated there is no danger in reasonably fast driving. In fact in the city of Chicago a very large proportion of the accidents, as quoted by the authorities, occur not from fast driving but while automobiles are going slowly, as when rounding a corner or when going across streets where there is no stop signal and pedestrians become reckless in assuming that they have right of way. Furthermore, it has been determined that it is not the fast driver who necessarily is reckless, for a slow driver may be at fault and have more accidents than the fast driver. What we need in Indiana as well as everywhere is proper regulation of the traffic and not so much stress laid upon speed. Furthermore, the best results will be obtained when some proper attention is given to the subject of licensing all those who drive automobiles. At present little or nothing is said if an imbecile, a cripple, a half-blinded person, or one who is drunk drives an automobile, and any of these are menaces to the safety of the public.

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THE Academy of Medicine of Toledo, Ohio, is giving post-graduate courses. One of these courses is by a noted Berlin physician who is an authority upon diathermy. In announcing this course the committee calls attention to the fact that \$625 is the minimum rate for a first-class round-trip ticket to Berlin. This sum does not include hotel expenses nor any extras. It does not consider lost income due to enforced absence from one's practice. A course in post-graduate work in Berlin would be a costly investment. The attention of the doctors then is called to the post-graduate course that is brought right to them, a full week being furnished at a cost of \$20.

What is being done by the Academy of Medicine of Toledo can be done by other medical societies, and it is not necessary to import talent

from Berlin either in order to do creditable post-graduate work and advance the educational standing of physicians in any given community. We are strong for some form of post-graduate work to be offered by various medical societies, and we not only are disappointed but chagrined to think that our Indiana State Medical Association, at the West Baden session, paid so little attention to this very important question of bringing to the doors of its members post-graduate work that will make them better doctors and better able to serve the public. It is perfectly ridiculous to argue that men must go to New York, Philadelphia, London, Berlin or Vienna in order to get valuable post-graduate work which will aid them in their practices. Very few men can afford such trips and there is no reason why we should consider such trips as the only means of further education in order to keep abreast of the times. Why not bring post-graduate work right to their doors? It can and should be done.

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EVERY doctor should save something regularly from his income for the time when he cannot or does not want to practice, or for the time when adversity may strike him unawares. The average doctor invests in all sorts of wildcat schemes because the promoters offer large returns which in actual practice seldom materialize. The writer of this editorial note, many years ago received some valuable advice from a banker friend and has not forgotten it. In fact, he has profited by the advice and usually has been sorry when he did not follow the rules laid down which were as follows:

1. Invest in securities recognized as being safe. Unless you can afford to gamble and lose, it is not wise to invest money in enterprises that promise large returns but which usually are not considered safe. Gilt-edged securities do not promise large returns but they do offer safety. The creditor who is sound financially is not obliged to pay large interest rates. It is the creditor who has questionable backing who offers large interest or commission for money to carry on a business that only too frequently ends in disaster. It is a pure gamble to put money in an enterprise of that character.

2. Secure advice from a reputable specialist concerning investments. Doctors laugh at sick people who consult the stonemason, the blacksmith, or the jeweler concerning the recognition and treatment of human ills. Likewise the reputable banker who makes a specialty of investments and analyzes the conditions prevailing, laughs at the doctor who becomes an investor on the advice or suggestion of the stonemason, the bricklayer, a friend, a relative, or anyone else who is apt to be incompetent to give trustworthy advice. When making an investment, seek the counsel and advice of a specialist, usually a banker, who has analyzed the question of investments and their safety. The banker may make a mistake, for it is a human frailty, but he is far



less likely to make a mistake than the average man, and therefore his advice should be respected.

THE United States has more automobiles per capita than any country in the world, but, aside from this, any one of five states has more automobiles than all the rest of the world put together. It is a strange thing that with all of our highly developed automobile industry so little attention has been given to the subject of transportation through the air. The United States is woefully behind every other civilized country in the world in aeronautics, despite all that has been said by our officers in the Army and Navy who for some reason or other seem disinclined to accept as a fact that which everyone else recognizes. It is true that the United States Air Mail has been quite successful, but air mail has been developed still more in Europe, and, aside from this, the European passenger traffic by air is now upon an established basis whereas we scarcely ever hear of passenger transportation by air in the United States, the richest and by many supposed to be the most up-to-date country in the world. Air service for our Army and Navy has been a dismal failure. Competitive work in the air, conducted under the auspices of this country, was a dismal failure, as the foreigners defeated us at every point. When will our lawmakers and executive officers realize that transportation through the air is the coming mode of offense and defense in time of war. We are in entire sympathy with the idea that the United States should mind its own business and keep out of foreign entanglements, but at the same time we believe that we should prepare for defense, for it will not be long until defense will be needed, no matter how pacific our views may be. Nearly all analytical war experts declare that the next war will be fought in the air, and in consequence it will be necessary for this country to have an abundance of the very latest and best air craft in order to protect our country from invasion. And then they say, "Why do you talk about these matters in a medical journal?" Our answer is that we believe that medical men ought to pay some attention to matters outside of medical politics and medical thought. Anything that is for the best interests of our cities, our state, or our country, ought to be of interest to every medical man, and we ought to show that interest by taking a hand in the discussion of the problems that confront us. Our medical profession represents an intelligent part of the population, and when once it begins to take an active interest in public affairs, then the medical profession will be given its due place in the councils of the nation, and not only will our opinions have some weight with the legislators, but when we talk about medical affairs, where we really need to have some respect, it will be of greater import.

THE average doctor knows that when he buys automobile insurance he is placed in the same category with the wildest automobile driver that ever lived, and that when paying his premium he has to pay for the losses of a lot of incompetent drivers. Fortunately one or two automobile insurance companies are beginning to recognize the fact that medical men should be classed as preferred risks and they are making reduced rates to the members of the medical profession in consequence. These companies are not mutual nor reciprocal, and, in fact, have nothing to their discredit, but are wholly responsible and have established reputations for fulfilling their contracts. It would be well for every doctor who carries automobile insurance to make some investigation of these facts before placing his insurance for another year. The A. M. A. has made a searching investigation of some of these companies and is prepared to offer some valuable suggestions.

How many doctors know that when they carry an automobile policy that values a car at \$2,500 the premium charged is for such valuation, but in case of loss the company will pay only what is reckoned as the cash value of the car, which oftentimes is not to exceed twenty-five percent of the estimated value as placed in the policy by the owner. For instance, we know of one man who had an insurance policy calling for a valuation of about \$1,000 upon his car, and during the life of the policy the car was stolen, and not returned, but the company would pay only \$75 for the loss of the car, as the adjusters said that was all the car was worth according to the rating established by the automobile dealers' association. Under such circumstances what is the reason for paying a premium upon a valuation of \$1,000 when it would be impossible to collect that sum in case of loss. This only reminds us that there are many technicalities in connection with various indemnity policies, and it would be well for people to read their policies before accepting them. As a concrete example of what an insurance company will do after blithely taking premiums for several years, a friend of ours who carried burglary insurance met a loss as a direct result of thieves entering his house and stealing furs, clothing, and jewelry. The police and the insurance company were notified, but upon investigation there were no signs of breaking into the house, as evidenced by broken window panes, a jimmied window or anything of that kind. Probably the thieves found a window conveniently left unlocked or open, and it was in that way that they gained entrance and afterward left the house. The insurance company refused to settle, on the ground that its policy distinctly states that burglary, in the common acceptance of the term, must be considered as burglary only when brought about through forcible entrance to the residence or place of business. Could anything be sweeter for an insurance company than a clause of that kind? So we say, read your

policies, and especially those policies which you may suspect as containing a "joker." In this connection we are urged to suggest that when taking out your insurance, don't take the cheapest insurance you can get, and don't take insurance from little companies that never have been heard of before, for the latter are the ones that usually stand out on technicalities. The large and well-established organizations are usually more liberal, and anyway the best, even though costing more, is the cheapest in the long run.

### DEATHS

EDWARD WERTZ, M.D., of Flat Rock, died January 14th, aged fifty years.

F. A. BUSJAHN, M.D., of Logansport, died December 17th, aged sixty-nine years. Dr. Busjahn graduated from the Bellevue Hospital Medical College, New York City, in 1879. He had practiced medicine in Logansport for forty-four years.

A. W. DAVIDSON, M.D., of Brownsburg, died January 10th, aged eighty-five years. Dr. Davidson graduated from the College of P. and S. of Indiana, Indianapolis, in 1876, and was a member of the Hendricks County Medical Society, the Indiana State Medical Association and the American Medical Association.

CARLOS C. ROZELLE, M.D., of Lagrange, died December 31st, from bronchial pneumonia. Dr. Rozelle was forty-three years old. He graduated from the Jefferson Medical College of Philadelphia, in 1907. He was a member of the Lagrange County Medical Society, the Indiana State Medical Association and the American Medical Association.

FREDERICK WILLIAM SHALEY, M.D., of Terre Haute, died December 27th, aged sixty-eight years. Dr. Shaley graduated from Rush Medical College, Chicago, in 1884. He was a fellow of the American College of Surgeons and a member of the Vigo County Medical Society, the Indiana State Medical Association and the American Medical Association.

### NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. W. H. BRAUNLIN and Miss Helen Jeffrey, of Marion, were married December 19, 1926.

DR. A. H. SHAFFER, of Huntington, celebrated his ninety-eighth birthday on January 15th.

DR. ROBERT G. HARKNESS, of Terre Haute, and Dr. Clela Hall, of Indianapolis, were married December 24th.

THE tenth annual meeting of the Indiana Academy of Ophthalmology and Otolaryngology was held in Indianapolis, January 12th and 13th, with headquarters at the Indianapolis Athletic Club.

THE annual Congress on Medical Education, Medical Licensure and Hospitals will be held in Chicago February 14, 15 and 16, 1927, with headquarters at the Palmer House.

ON January 4th, 100 percent of the members of the Noble County Medical Society, twenty-two in all, had paid their dues for the year 1927. W. F. Carver, of Albion, is secretary of this society.

THE Grant County Medical Society held a meeting at the Spencer Hotel, Marion, January 25th. Papers were presented by Drs. Harry Aldrich, Neal Loomis, R. H. Stenger and N. B. Powell.

AT the annual meeting of the Miami County Medical Society, Dr. C. F. Worrell, of Peru, was elected president; Dr. P. B. Carter, of Macy, vice-president, and Dr. John E. Yarling, of Peru, secretary-treasurer.

DR. EDWARD L. LIBBERT, who has been practicing at Dillsboro, Indiana, has removed to Indianapolis, where he will be associated with Dr. Edwin N. Kime in the practice of internal medicine with special attention to physical therapy.

A JOINT meeting of the Madison County Medical Society and the Tipton County Medical Society was held January 18th, at Elwood. Dr. W. B. Gatch, of Indianapolis, presented a paper on, "The Practice of Medicine from the Standpoint of Prognosis."

DR. C. R. LONG, of Piercetown, was the guest of honor at a dinner given by the Kosciusko County Medical Society at the Hotel Hays, Warsaw, December 23rd. Dr. Long is retiring from active professional life after serving as a physician for forty-six years. He is spending the winter in Florida.

AT the meeting of the Indianapolis Medical Society held January 4th, Dr. Homer G. Hamer was elected president; Dr. Herman G. Morgan, first vice-president; Dr. L. H. Pearson, secretary (re-elected), and Drs. C. L. Cabalzer, B. J. Larkin, O. H. Mertz, Max Bahr and H. F. Beckman, judicial council members.

THE Northeastern Indiana Academy of Medicine held a meeting at Gawthrop Inn, Kendallville, January 6th. Dr. Ernest E. Irons, of Rush Medical College, Chicago, presented a paper on,



"Symptomatology and Treatment of Chronic Infections." Dr. M. E. Klinger, of Garrett, presented a paper on "Tubercular Tests Upon School Children."

THE Sofie A. Nordoff-Jung prize for the best contribution in cancer research during the past years has been awarded to Dr. Otto Warburg, director of the Department of Biology of the Kaiser Wilhelm Institute, Berlin-Dahlem. Professors Borst, Doederlein, von Romberg and Sauerbruch, all of the University of Munich, form the awarding commission.

THE annual clinical session of the American College of Physicians will be held in Cleveland, Ohio, February 21 to 25, 1927. A program of unusual interest has been planned in which the Cleveland hospitals and the Western Reserve University are co-operating. The college has extended an invitation to all qualified physicians and laboratory workers to attend its session.

THE Orange County Medical Society held a meeting December 29, 1926, at which the following officers were elected for 1927: President, Dr. R. E. Baker, Orleans; vice-president, Dr. H. L. Miller, West Baden; secretary, Dr. C. E. Boyd, West Baden; delegate to the state convention, Dr. S. F. Teaford, Paoli; censors, Drs. J. R. Dillinger, French Lick; J. I. Maris, Paoli, and O. H. Stewart, Orleans.

THE United States Civil Service Commission announces open competitive examination for Physiotherapy Aide, Physiotherapy Pupil Aide and Physiotherapy Assistant. Applications for these positions must be on file at Washington, D. C., not later than March 12 and May 28, 1927. Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C.

THE United States Civil Service Commission announces open competitive examination for Assistant Medical Officer, Associate Medical Officer, Medical Officer and Senior Medical Officer. Applications will be rated as received by the U. S. Civil Service Commission at Washington until June 30, 1927. Full information and application blanks may be obtained from the United States Civil Service Commission at Washington, D. C.

THE Noble County Medical Society has elected the following officers for the year 1927: President, Dr. C. E. Munk, Kendallville; vice-president, Dr. W. M. Veazey, Avilla; secretary-treasurer, Dr. W. F. Carver, Albion; censors, Dr. J. W. Moor, Albion; Dr. F. C. Hardy, Kendallville and Dr. H. O. Williams, Kendallville; delegates to the state convention, Drs. J. H. Ravenscroft, of Albion, and B. O. White, of Wolcottville.

At the meeting of the Board of Medical Registration and Examination held in Indianapolis, January 11th, Dr. W. A. Spurgeon, of Muncie, was re-elected president; Dr. E. M. Shanklin, of Hammond, was elected secretary to succeed Dr. W. T. Gott, of Crawfordsville, who resigned after having served as secretary of the board for twenty-seven years. Dr. J. B. Kinsinger, of Rushville, was made vice-president, and Dr. J. W. Bowers, of Fort Wayne, was re-elected treasurer.

THE Indiana Tuberculosis Association again is sponsoring a tuberculosis institute for Indiana physicians. The institute this year will be held May 16th-21st, and is being offered by the Tuberculosis Association in co-operation with the Indiana University School of Medicine. The program will include personal and group instruction in the methods of diagnosing and treating tuberculosis, which instruction will be given through lectures, demonstrations and clinics. Besides the leading tuberculosis physicians of Indiana, several well-known authorities from other states will assist in the institute through addresses. These will include Dr. J. S. Pritchard, of Battle Creek Sanatorium; Leroy S. Peters, of Albuquerque, New Mexico; Dr. Horace LoGrasso, of the J. N. Adam Memorial Hospital, Perrysburg, N. Y., and Dr. H. Kennon Dunham, Cincinnati, Ohio. The fee for the course will be \$10.00. Further information may be obtained by writing to the Indiana Tuberculosis Association, 1220 Meyer-Kiser Bank Building, Indianapolis.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the A. M. A.:  
Cutter Laboratory:

- Diphtheria Toxin-Antitoxin Mixture 0.1 L.
- Eli Lilly & Co.:
- Cholera Vaccine, Prophylactic.
- Plague Vaccine, Prophylactic.
- Old Tuberculin Human Strain Concentrated.
- Pirquet Test.
- Tuberculin Ointment for the Moro Percutaneous Test.
- Tuberculin T. R. Concentrated Human Strain.
- Tuberculin B. E. Concentrated Human Strain.
- Tuberculin B. F. Concentrated Human Strain.
- Ampoules Glucose (Dextrose U. S. P.) Lilly 10 Gm., 20 cc.
- Ampoules Glucose (Dextrose U. S. P.) Lilly 25 Gm., 50 cc.
- H. A. Metz Laboratories, Inc.:
- Gynergen:
- Ampules Gynergen, 1.1 cc.
- Tablets Gynergen, 0.001 Gm.
- Parke, Davis & Co.:
- Bismuth Salicylate in Oil-P. D. & Co.
- Winthrop Chemical Co.:
- Tutocain:
- Tablets Tutocain No. 1 (with epinephrin) 0.03 Gm.

Tablets Tutocain No. 2 (with epinephrin)  
0.03 Gm.

Tablets Tutocain No. 3 0.03 Gm.

Tablets Tutocain No. 4 (with epinephrin)  
0.05 Gm.

Tablets Tutocain No. 5, 0.1 Gm.

## SOCIETIES AND INSTITUTIONS

### BUREAU OF PUBLICITY

December 20, 1926.

Meeting was called to order at 4:45 o'clock.

Present: Wm. N. Wishard, M.D.; S. E. Earp, M.D. and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held December 13th read, corrected and approved.

The release, "Christmas Hint from the Physicians" read and approved for publication, December 23rd. The release for Monday, December 27th, "A New Year's Resolution" read, corrected and approved.

Word received from secretary of the Indianapolis Medical Society to complete arrangements for periodic health examination meeting preferably on March 8th.

Bulletin No. 5, December 13, 1926, of the Indiana High School Athletic Association read before Bureau. Bureau especially wishes to compliment the association on its action in regard to physicians' certificates which provide "That each student participating in inter-school basketball, football or track shall have a physician's certificate on file in the principal's office stating that this student is physically fit to enter athletic contests." The Bulletin says, "The physical examinations should be carefully and efficiently made by regularly licensed physicians—certificates issued on the basis of anything less than thorough examinations by reputable physicians will do more harm than good. They will be misleading and will offer no protection at all to the physician, the player, the parents or the school.

Sample health films received from Spencer Lens Company.

Report received by Bureau on talk before Marion Kiwanis Club December 8th.

Letter received from Columbia, Indiana, Chamber of Commerce relative to the standing of Paul O. Sampson, who represents the National Health League, 616 Military Park Building, Newark, N. J. Letter answered telling why State Medical Association cannot endorse Paul O. Sampson nor the so-called "National Health League."

Secretary instructed to prepare questionnaire in order that survey may be completed concerning the number of periodic health examination meetings in the various county societies of the state.

Letter received from secretary of Tippecanoe County Medical Society requesting speakers upon subject of "Physical Therapy." Letter states, "In this time of chaos in physical Therapy a request comes to have a man address our society on physical therapy. We want a man of experience who can give a practical talk and has nothing to sell."

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole December 27, 1926.

WM. N. WISHARD, M.D.,  
Chairman.

THOMAS A. HENDRICKS,  
Executive Secretary.

### BUREAU OF PUBLICITY

December 27, 1926.

Meeting called to order at 4:45 P. M.

Present: Wm. N. Wishard, M.D.; S. E. Earp, M.D.; Murray N. Hadley, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held December 20th read, corrected and approved.

The release, "Basketball and Physical Examination," read and approved for publication January 10th.

The Publicity Bureau considered the following subjects which were referred to it from the mid-winter meeting of the Council, held December 17th:

(1) Suggestion that the Publicity Bureau appoint an S. O. S. committee of twenty-five men to do emergency work in rejuvenating dead societies and arranging programs for these societies. The Bureau is doing a great deal of this work at the present time and instructed the secretary to get in touch with the individual councilor who suggested this committee and obtain some definite details concerning his idea of the work to be done by such committee.

(2) The Council recommended that the State Board of Health and the Publicity Bureau get together to co-operate in working out the best means of educating the public and the physicians of the state concerning the administration of rabies and tetanus antitoxin and diphtheria toxin-antitoxin.

The secretary was instructed to arrange a joint meeting for the secretary of the State Board of Health and the members of the Publicity Bureau.

(3) The Council suggested that the Bureau write the postmaster general in regard to the use of the mails by many persons for fraudulent medical advertising purposes.

The secretary was instructed to compile data showing the efforts that the post office department was making to clean up commercial and medical frauds.

Letter received from the Columbus, Indiana, Chamber of Commerce thanking the Publicity Bureau for information sent that organization in regard to the standing of Paul O. Sampson, of the so-called "National Health League" of Newark, New Jersey.

Letter received from the Rotary Club of Goshen, Indiana, asking for information concerning the standing and reputation of Paul O. Sampson. The secretary was instructed to answer this letter, giving all information he has concerning Sampson and the National Health League.

Request received from the secretary of the Rush County Medical Society asking the Bureau to supply a speaker for the meeting of the county medical society on January 3rd.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole, January 3, 1927.

WM. N. WISHARD, M.D.,  
Chairman.

THOMAS A. HENDRICKS,  
Executive Secretary.

### BUREAU OF PUBLICITY

January 10, 1927.

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D., chairman; Murray N. Hadley, M.D.; J. A. MacDonald, M.D.; Frank W. Cregor, M.D.; president of the Association, and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held December 27th read, corrected and approved.

The release, "Open Season for Colds," read and approved for publication January 24th.

Letter received from secretary of the Parent-Teachers' Association enclosing bulletins outlining the plans adopted by their Association for the campaign of education on the prevention of diphtheria. This campaign was to be carried on in co-operation with the State Board of Health and the Indiana State Medical Association. The secretary was instructed to formulate a letter to be sent to the secretaries of the county medical societies urging their co-operation with the Parent-Teachers' Association in the diphtheria prevention campaign work.

Letter received from director of the Bureau of Investigation of the American Medical Association telling of the excellent work that the post office department has done in curbing medical frauds during the administration of Harry S. New. Secretary was instructed to draft a



letter to be written to Mr. New approving of the very effective work.

A request for a speaker at the Noon Rotary Luncheon Club, January 24th, at Connersville.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole, January 17, 1927.

WM. N. WISHARD, M.D.,  
Chairman.

THOMAS A. HENDRICKS,  
Executive Secretary.

#### FLOYD COUNTY MEDICAL SOCIETY

January 14, 1927.

The Floyd County Medical Society met in regular monthly meeting at Library Hall on the above date, with the newly elected president, Dr. Fred Bierly, of Elizabeth, in the chair. Dr. Bierly gave a brief talk, in which he stated that he was very proud of the honor conferred upon him by the society and thanked the members for same and assured the society that he would do all in his power to make the society a success the coming year.

Minutes of the previous meeting were read and approved.

Dr. Shacklet brought up the question of fees for compensation work, inasmuch as the law requires a number of papers and reports to be filled out and made, necessitating work for the doctor, whereupon he made a motion that the minimum fee for office calls for compensation work be \$2.00. Motion was seconded and carried.

Dr. J. V. McCullough brought in a patient for the clinic, an infant with congenital deformity of the skull, an unusual and interesting case.

Dr. W. Barnett Owen, of Louisville, Ky., the essayist, gave a talk on and illustrated with moving pictures on disabling deformities following infantile paralysis, which was very interesting and instructive. All patients shown by Dr. Owen were unable to walk when brought to him. After operation, and placing disabled limb in plaster cast and later in braces all were able to walk with the aid of crutch and cane. A very commendable and humane work Dr. Owen is doing for disabled children.

A number of questions were asked Dr. Owen which were all satisfactorily answered and explained. A free discussion followed, bringing out many points, making the meeting an interesting and profitable one to those who were present.

There being no further business the meeting adjourned.

FRED BIERLY  
President.

P. H. SCHOEN,  
Secretary.

#### CLAY COUNTY MEDICAL SOCIETY

The December meeting was held at the Community Hospital, Brazil, Indiana. Report of delegates to the state association was heard, and a paper on complete physical examination was presented by Dr. Fred C. Dilley. A very profitable general discussion followed by members of the society.

A program was announced for the January meeting. Papers will be presented by Drs. H. M. Pell and L. S. Hirt. On motion the secretary was instructed to invite the Putnam County Medical Society to meet here with the Clay County Society in a joint session at the January meeting.

A resolution was unanimously adopted offering to the newly appointed Hospital Board the co-operation of the entire medical profession of the county. An advisory committee with whom the board may confer at any time, was appointed as follows: Drs. Harry Elliott, Brazil; H. H. Ward, Coalmont; Lewis C. Rentschler, Clay City; H. M. Pell, Brazil; G. R. Finch, Centerpoint; Wm. Palm, Brazil.

Election of officers followed. A motion was made and carried to continue the present officers for the year 1927. Dr. G. W. Finley, president, and Dr. Wm. Palm, secre-

tary; Dr. H. M. Pell, delegate to state convention, and Dr. P. H. Veach, alternate.

WM. PALM, M.D.  
Secretary Clay Co. Medical Society.

## TRUTH ABOUT MEDICINES

### NEW AND NONOFFICIAL REMEDIES

**TETANUS ANTITOXIN FOR HUMAN USE (NEW AND NONOFFICIAL REMEDIES, 1926, p. 333).**—This product is also marketed in packages of one syringe containing 10,000 units and in packages of one syringe containing 20,000 units. Cutter Laboratory, Berkeley, Calif. (*Jour. A. M. A.*, Dec. 4, 1926, p. 1917).

**TYPHOID PROPHYLACTIC (NEW AND NONOFFICIAL REMEDIES, 1926, p. 359).**—This typhoid vaccine is also marketed in packages of one syringe and in a 20 cc. bottle. Cutter Laboratory, Berkeley, Calif.

**SCARLET FEVER STREPTOCOCCUS ANTITOXIN CONCENTRATED GLOBULIN—P. D. & Co. (NEW AND NONOFFICIAL REMEDIES, 1926, p. 332).**—The product is now prepared by the method of Drs. Dick. This product is also marketed in single 1 cc. vial packages (for the diagnostic blanching test). Parke, Davis & Co., Detroit, Mich. (*Jour. A. M. A.*, Dec. 11, 1926, p. 1999).

**HOMOCAMFIN.—CYCLOSAL.** — 3-methyl-5-isopropyl- $\Delta^2$ -cyclohexanone dissolved in an aqueous solution of sodium salicylate. Methylisopropylcyclohexanone, the potent constituent of homocamfin, is claimed to have an action similar to camphor, but to surpass it in intensity and rapidity of action on the heart and respiration. It acts almost instantly when given intravenously, hence caution must be used when it is administered in this way. Homocamfin is used as a stimulant in cardiac failure, surgical shock, narcotic poisoning and respiratory failure. The product is marketed in Ampules Homocamfin 10 per cent (for intramuscular use) and Ampules Homocamfin 1 per cent (for intravenous use). Winthrop Chemical Co., New York.

**TUTOCAIN.—BUTAMIN.** — p-amino-benzoyldimethylamino-methyl-butanol hydrochloride. Tutocain is a local anesthetic employed chiefly for surface anesthesia and by subcutaneous injection. In experiments made for the Council, Tutocain in 3 per cent solution is about four times as toxic as procaine hydrochloride by rapid intravenous injection into the cat and a fatality has been reported following the injection of 8 cc. of a 2 per cent solution into the urethra. On the other hand, experiments and clinical trials have been reported in support of the claim that Tutocain is relatively safe for use in surface anesthesia and by hypodermic injection. Tutocain is marketed as: Tablets Tutocain No. 1 (with Epinephrin) containing 0.03 Gm.; Tablets Tutocain No. 2 (with Epinephrine) containing 0.03 Gm.; Tablets Tutocain No. 3 containing 0.03 Gm.; Tablets Tutocain No. 4 (with Epinephrin) containing 0.05 Gm.; Tablets Tutocain No. 5, containing 0.1 Gm. Winthrop Chemical Co., Inc., New York. (*Jour. A. M. A.*, Dec. 18, 1926, p. 2093).

**DIPHTHERIA TOXIN ANTITOXIN MIXTURE 0.1 L.**—Each cc. of the Diphtheria Toxin-Antitoxin Mixture (New and Nonofficial Remedies, 1926, p. 333) represents 0.1 L dose of diphtheria toxin neutralized with the required amount of antitoxin. The product is marketed in packages of three 1 cc. vials for one immunization; in packages of thirty 1 cc. vials for ten immunizations; in packages of one vial containing 50 cc. Cutter Laboratory, Berkeley, Calif.

**PIRQUET TEST.**—Tuberculin-Koch (New and Nonofficial Remedies, 1926, p. 344) marketed in packages of three capillary tubes. Eli Lilly & Co., Indianapolis.

**TUBERCULIN OINTMENT FOR THE MORO PERCUTANEOUS TEST.**—Tuberculin-Koch (New and Nonofficial Remedies, 1926, p. 344) marketed in the form of an ointment in tubes containing 2 Gm.

**OLD TUBERCULIN, HUMAN STRAIN, CONCENTRATED.**—Tuberculin-Koch (New and Nonofficial Remedies, 1926,



p. 344) marketed in 1 cc. vials. Eli Lilly & Co., Indianapolis.

**TUBERCULIN, T. R. CONCENTRATED, HUMAN STRAIN.**—New Tuberculin T. R. (New and Nonofficial Remedies, 1926, p. 347) marketed in 1 cc. vial packages. Eli Lilly & Co., Indianapolis.

**TUBERCULIN, B. E. CONCENTRATED, HUMAN STRAIN.**—New Tuberculin B. E. (New and Nonofficial Remedies, 1926, p. 347) marketed in 1 cc. vials. Eli Lilly & Co., Indianapolis.

**TUBERCULIN, B. F. CONCENTRATED, HUMAN STRAIN.**—Tuberculin Denys (New and Nonofficial Remedies, 1926, p. 349) marketed in 1 cc. vials. Eli Lilly & Co., Indianapolis.

**PLAGUE VACCINE PROPHYLACTIC.**—Plague bacillus vaccine (New and Nonofficial Remedies, 1926, p. 354) marketed (for single vaccinations) in packages of two 1 cc. vials; in packages of ten 1.5 cc. vials; in packages (for double vaccinations) of one 20 cc. vial; in packages of three 1 cc. vials. Eli Lilly & Co., Indianapolis.

**CHOLERA VACCINE, PROPHYLACTIC.**—Cholera vaccine (New and Nonofficial Remedies, 1926, p. 351) marketed in packages of three 1 cc. vials; in packages of ten 2.5 cc. vials. Eli Lilly & Co., Indianapolis. (*Jour. A. M. A.*, Dec. 25, 1926, p. 2163).

### PROPAGANDA FOR REFORM

**OLEOSOLUTION NOT ACCEPTED FOR N. N. R.**—The Council on Pharmacy and Chemistry reports that Oleosolution, according to the Nizza Laboratories, Inc., Chicago, is a "New therapeutic agent" which is "Made in France by a Special Process of J. Truc" and which is "Used with Great Success as Basic Treatment in Cases of Tuberculosis, Chronic Bronchitis, Grippe, Pneumonia, Asthma." It is to be administered orally, by intratracheal injection, by rectum and applied externally. The following complex, indefinite and essentially meaningless "formula" is furnished. "Vegetable Essences: Thymus Vulgaris, Thymus Scrpillum, @ @ 50 gr.—Eucalyptus Globulus, Malaleuca Leucadendron, Salvia Sclarca—@ @ 100 gr.; Vegetable Organic Mineral Salts: Smilax Officinalis, Queros Robur, Urtica Urens, Glecoma-Hederacea, Abies Pectinata, Fucus Vesiculosus,—@ @ 200 gr.; Vegetable Chlorophylls, Waxes, Ferments, Vitamines: Caulis, Apium Petroselinum, Racomus Cerosus, Pomum,—@ @ 150 gr.; Oleum Olivarium, 10,000 gr." The Council found Oleosolution unacceptable for New and Nonofficial Remedies because it is an indefinite, semi-secret and needlessly complex mixture which is marketed with exaggerated and unwarranted therapeutic claims and in a way to lead to its ill-advised use by the public. (*Jour. A. M. A.*, Dec. 4, 1926, p. 1933).

**ENTEROCAP ORALSULIN.**—This is advertised by the Lafayette Pharmacal Co. as "a product of the Pancreas of young food animals that is designed for use as an adjunctive treatment of Diabetes Mellitus." From this and other statements it appears that it is claimed to be a preparation containing insulin put up in enteric coated capsules for oral administration. Even if one could be sure that the insulin said to be present would arrive in the intestine unharmed, the weight of evidence is against its probable effectiveness. There is no convincing evidence to show that any preparation taken by mouth is an effective means of producing the characteristic action of insulin. (*Jour. A. M. A.*, Dec. 4, 1926, p. 1935).

**PHYSICAL THERAPY.**—The Council on Physical Therapy of the American Medical Association is now ready to consider devices for physical therapy. The consideration of apparatus will be governed by Official Rules, designed to protect the medical profession and the public against fraud, undesirable secrecy and objectionable advertising in connection with apparatus and methods for physical therapy. Devices and methods that have been found acceptable as conforming to the rules will be described in an Accepted List. (*Jour. A. M. A.*, Dec. 11, 1926, p. 1999).

**THERAPEUTICS.**—ANNO DOMINI 1926—A few pseudo-medical journals still eke out a precarious living by selling their advertising pages to nostrum exploiters who

cannot obtain space in reputable medical journals. One of these survivals is the *Archives of Therapeutics*, published by the Archives of Therapeutics, Inc., 243 Fourth Ave., New York City, which gives on its title page the names of Carl P. Sherwin, M.D., Sc.D., LL.D., as editor, Benjamin Harrow, Ph.D., as managing editor, and of fifteen associate editors, some of whom are men of unquestioned professional standing. In the November, 1926, issue are thirteen and three-quarter pages of advertisements of nostrums, the great majority of which are not only unacceptable for "New and Nonofficial Remedies," but have also been at one time or another the subject of critical reports. Some of these are: Abican, Agarol, Anasarcin, Antiphlogistine, Campho-Phenique, Cactina Pillets, Chionia, Echtol, Gray's Glycerin Tonic, Hexalet, Hyperol, Pasadyne, Phillips' Phospho-Muriate of Quinine, Peacock's Bromides, Pineoleum, Prunoids, Sal Hepatica, Sanmetto. In addition to this list there is a full-page advertisement of "Orchaphrin Tablets" and "Ovaphrin Tablets," described as aphrodisiacs for men and women respectively. They are said to be mixtures of yohimbine hydrochloride, extract of nux vomica, sodium nucleinate, pituitary, thyroid and suprarenal substances, and to differ only in that the "Aphrodisiac for Men" contains, in addition to the products listed, orchic substance, while the "Aphrodisiac for Women" has ovarian substance.

This number also contains a "Ready Reference Index" listing 120 pathologic states and giving 300 recommendations of proprietary remedies for their treatment. (*Jour. A. M. A.*, Dec. 11, 1926, p. 2017).

**COD LIVER OIL EXTRACTS.**—The available evidence points against the efficiency of the products that have been included in the cod liver oil extract category. Vitamins A and D, in which cod liver oil abounds, tend to dissolve with readiness in fats or fat solvents. The so-called extracts are usually at best weak alcoholic fluids of very doubtful solvent power so far as the vitamins referred to are concerned. The malt extracts that may be incorporated with the proprietary mixtures may have potencies that cannot, however, be identified with the specific characteristics of the cod liver oil. Recently, vitamin concentrates have been prepared from cod liver oil by saponification of the latter, the potent substances being contained in the nonsaponifiable fractions. Such a cod liver oil concentrate has been accepted by the Council on Pharmacy and Chemistry. (*Jour. A. M. A.*, Dec. 11, 1926, p. 2019).

**PHOSPHORUS IN RICKETS.**—The reports in regard to the efficacy of elementary phosphorus in rickets are surprisingly contradictory. Experiments have been carried out, however, which show that elementary phosphorus has no significant healing potency in rickets. (*Jour. A. M. A.*, Dec. 18, 1926, p. 2094).

**CLEARWATER'S RHEUMATIC TREATMENT.**—In the village of Hallowell, Maine, there has been conducted for some years a piece of mail-order quackery by one H. P. Clearwater, a man without medical training. Clearwater has a somewhat extensive line of nostrums, some of which are sold exclusively on the mail-order plan, while in the sale of others, Clearwater splits profits with drug stores. Clearwater's mail-order activities are mainly with his alleged cure for rheumatism "Clearwater's Scientific Rheumatic Treatment." From an analysis made in the A. M. A. Chemical Laboratory it appears that the "treatment" consists of two kinds of laxative tablets, one of which has in addition: sodium iodide 1/3 grain and sodium carbonate 5 grains per tablet. (*Jour. A. M. A.*, Dec. 18, 1926, p. 2112).

**BAR-CHE-CO.**—The price list of Barksdale Chemical Co., successors to the Webster-Warnock Chemical Co., Memphis, Tenn., presents the usual pills, elixirs, tinctures, etc., and the inevitable assortment of irrational shotgun "specialties". A booklet and form letter feature "Bar-Che-Co." "the mighty aphrodisiac," recommended for "its therapeutical value in the treatment of Neurasthenic impotence." The preparation is claimed to contain "Yohombine (Yohimbine?) hydrochloride," 1/12 Gr., "Extract Nux Vomica," 1/6 Gr., "Lecithin," 1/8



Gr., "Pituitary Substance," 1/24 Gr., "Thyroid Substance" 1/12 Gr., "Suprarenal (Suprarenal?) Substance," 1/5 Gr. This is a typical shotgun mixture, and is open to all the objections that have been made to this discredited style of therapy. (*Jour. A. M. A.*, Dec. 18, 1926, p. 2114).

**THYROID IN OBESITY.**—Reduction of weight should not be undertaken by means of thyroid alone. Dietary procedures form the basis of all scientific and rational reduction methods. In some instances, when diet will not suffice, thyroid may be used. When describing the drug physicians should make certain that they will be supplied with the U. S. P. product and small doses should be given at the beginning, watching the pulse and nervous system. Thyroid is always a double-edged sword and must be used with caution. (*Jour. A. M. A.*, Dec. 18, 1926, p. 2114).

**"NARCOSAN" AND DRUG ADDICTION.**—Newspapers have carried a story concerning the discovery by "Dr." A. S. Horovitz of a new remedy for drug addiction known as "narcosan." Since 1913, Horovitz has been identified with attempts to promulgate cures for all sorts of disorders by mixtures of lipoids and vegetable substances of the nature of nonspecific proteins. Included in his records are the Horovitz-Beebe "cure" for cancer, the Merrell Proteogens for the cure of practically everything and more recently "narcosan," originally brought out about 1920 under the name of "Lipoidal Substances." Horovitz's present effort to promote "narcosan" as a cure for narcotic addiction, is supported by an investigation by Dr. Alexander Lambert, ex-president of the American Medical Association and Frederick Tilney, one of the editors of the *Archives of Neurology and Psychiatry*. The paper appeared in the *New York Medical Journal and Record*. It was rejected by the *Journal of the American Medical Association* because the Council on Pharmacy and Chemistry rejected the product known as "Lipoidal Substances" in 1921, because up to the present time the product has not been resubmitted, and is apparently still of unestablished composition, and because the clinical investigations are not set forth in such a manner as to indicate even ordinary controls. (*Jour. A. M. A.*, Dec. 18, 1926, p. 2097).

**ORGANOTONES.**—"Organ-O-Tones No. 19" is one of a series of "shotgun" pluriglandular mixtures marketed by the Cole Chemical Co. and "pushed" vigorously as an "obesity" remedy, largely by means of postcards which tell nothing of the ingredients of the preparation. The product is said to contain: "Thyroid substance," 1/2 Gr.; "Pituitary (whole)," 1/4 Gr.; "Phytolaccin," 1/2 Gr.; "Apocynum (P. E.)," 1/4 Gr.; "Organ-O-Tones No. 12," (containing "Sodium Bicarbonate," "Potassium Bicarbonate," "Calcium Glycero-Phos," "Calcium Phos. (dibasic)," "Magnesium Phosphate,") 3 1/2 Gr. The complexity of the formula is exceeded only by the obviousness of the conclusion that the "Thyroid substance" is the ingredient intended to do the business. Organ-O-Tones No. 19 is, in effect, just another of the dangerous thyroid "anti-fat" nostrums to which attention has recently been directed. (*Jour. A. M. A.*, Dec. 25, 1926, p. 2179).

**MALT-NUTRINE NOT ACCEPTED FOR N. N. R.**—The Council on Pharmacy and Chemistry reports that Malt-Nutrine (Anheuser-Busch, Inc., St. Louis) is said to represent: "The Body-Building Strength of Choicest Hops and Malt Stored up in this unadulterated, uncolored, almost predigested LIQUID-FOOD-TONIC." The product is stated to contain alcohol, 3 Gm. and "hop extractives" 0.20 Gm. The product is stated to be "a nutritive tonic" and "not a beverage" and to be indicated in the treatment "of nursing mothers, anemic men and women, convalescents from wasting diseases and the overworked and undernourished." Since Malt-Nutrine is to be used as a medicine and not as a beverage, it becomes subject to consideration by the Council on Pharmacy and Chemistry. The Council held that it is unacceptable for New and Nonofficial Remedies because (1) the therapeutic

claims made for it are unwarranted and (2) the name is therapeutically suggestive. (*Jour. A. M. A.*, Dec. 25, 1926, p. 2177).

**TOXIVI AND TOXOK NOT ACCEPTABLE FOR N. N. R.**—The Council on Pharmacy and Chemistry reports that according to the Cutter Laboratory, Berkeley, Cal. Toxivi is stated to be an extract of *Rhus toxicodendron* for use in the prophylactic and therapeutic treatment of dermatitis caused by poison ivy. Similarly, Toxok is claimed to be an extract of *Rhus diversiloba* for use in prophylactic and therapeutic treatment of dermatitis caused by poison oak. The Council found Toxivi and Toxok unacceptable for New and Nonofficial Remedies, because the statement of their composition and strength is indefinite; because the claims advanced for them are not warranted, and because they are unoriginal preparations marketed under proprietary nondescriptive names. (*Jour. A. M. A.*, Oct. 16, 1926, p. 1321).

**FIRMA CHLORO NOT ACCEPTABLE FOR NEW AND NON-OFFICIAL REMEDIES.**—The Council on Pharmacy and Chemistry reports that, according to the advertising of the Chloro Chemical Corp., Bloomfield, N. J.: "Firma Chloro is made by mixing the following: Chloride of lime, potassium chlorate, tincture of iodine, picric acid, bicarbonate of soda and water." A report of a firm of chemists employed by the Chloro Chemical Corporation states that the sample was "essentially a solution in glycerine, of sodium and calcium hypochlorite, calcium carbonate and hydroxide, calcium chloride, calcium iodide, potassium chlorate and a salt of picric acid." While tincture of iodine is used the preparation of the mixture, the product as marketed is admitted not to contain free iodine. In the advertising the product is said to contain 0.04 per cent of available chlorine, and the claims for its efficacy seem to be based on this very small percentage of potent chlorine. Firma chloro was found inadmissible to New and Nonofficial Remedies because it is a needlessly complex mixture marketed under a non-informing name. (*Jour. A. M. A.*, Oct. 16, 1926, p. 1321).

**HARROWER'S ORGANOTHERAPEUTIC INDICATOR.**—To advertise its pluriglandular products, the Harrower Laboratory uses a device containing an "indicator" in the form of an arrowhead, the shaft of which is a slot in a disk, superimposed on a larger disk. Around the edge of the larger disk are the names of some seventy diseases or disease conditions. When the arrow is rotated to point to any one of these names, one or two numbers become visible through the slot; these refer to the list of "pluriglandular formulas" on the back of the disk. Each condition has its appropriate (?) formula. The Council on Pharmacy and Chemistry has reported on a number of Harrower gland mixtures, pointing out the lack of evidence for their efficacy when given by mouth and also the irrationality of prescribing mixtures that resemble those of the old-fashioned shotgun nostrums. The fact that it is apparently profitable for the Harrower Laboratory, Inc., to send out such advertising as that described, is a sad reflection on those physicians who allow themselves to be influenced by "literature" that is sent out by commercial houses. (*Jour. A. M. A.*, Oct. 16, 1926, p. 1322).

**VACCINE TREATMENT OF COLDS.**—It is not definitely known whether or not a cold is the result of a specific infectious process. The prophylactic as well as the curative value of vaccine therapy in this condition is therefore quite problematic. What we know about the nature of the affliction makes it highly improbable that much good can be accomplished by means of vaccine, and clinical experience seems to substantiate these deductions. (*Jour. A. M. A.*, Oct. 23, 1926, p. 1412).

**THE RADIOACTIVITY OF NATURAL WATERS.**—The presence of radioactivity in mineral waters was accepted by many as an explanation of the alleged clinical effects of such waters that had attained some reputation through



their use medicinally for bathing or drinking. After careful consideration of the evidence now available, the Council on Pharmacy and Chemistry of the American Medical Association concluded not to accept any radium solution for internal use the dosage of which is less than 2 micrograms per day, or any radon (radium emanation) generator that yields less than 2 microcuries of radon during each twenty-four hours. It has been estimated that to obtain the dose of 2 micrograms by drinking one gallon of water, which is considerably more than most people drink in a day, the radioactivity of the water would have to be about 500 millimicrocuries per liter (a millimicrocurie is the radioactivity corresponding to one-billionth gram of radium). A government expert has recently pointed out that although many waters exhibit some radioactivity, the doses necessary to produce detectable effects could not be obtained by drinking reasonable quantities of one of the naturally radioactive spring waters; of most waters it would be necessary to drink from 100 to 1,000 gallons a day. The best evidence is to the effect that, up to this time, it has not been shown that the small amounts of radioactivity found in natural waters have any effect on the medicinal value of the waters. (*Jour. A. M. A.*, Oct. 30, 1926, p. 1480).

**THE WIMPUS FRAUD.**—For some years, various individuals and concerns have exploited devices alleged to be for the purpose of making it possible in whom the erectile power was lost, to perform the sexual act. One of the most widely advertised products—the “Wimpus”—was exploited by a concern calling itself the Higrade Specialty Co., which seems to have offices in various cities, including New York, St. Louis and Dallas, Texas. The device appears to be made in Dallas, Texas, where the two men who are behind the scheme are said to live. Advertising for the product also goes out under the name “Surgical Splint Corporation.” A fraud order has been issued against the Higrade Specialty Co. debarring it from the use of the mails. A device similar to the “Wimpus” is at present exploited under the name “A-Val,” put on the market by the A-Val Specialty Co., Chicago. (*Jour. A. M. A.*, Oct. 30, 1926, p. 1497).

**MORE MISBRANDED NOSTRUMS.**—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: “Diabetylin,” “Haemozon 10A,” and “Astonax” (Haemozon Products Co.), the first consisting essentially of yeast and sodium phosphate, the second consisting essentially of magnesium carbonate and magnesium peroxide, while the third was essentially a mixture of alcohol, sugar and water, with small amounts of plant extractives. Santox Kidney and Bladder Pills (The DePree Co.), containing potassium nitrate and plant material, including juniper oil, Venice turpentine, cascara sagrada, uva ursi and pichi. (*Jour. A. M. A.*, Oct. 30, 1926, p. 1497).

## BOOK REVIEWS

**ROENTGEN INTERPRETATION.** By George W. Holes, M.D., Roentgenologist to the Massachusetts General Hospital and Assistant Professor of Roentgenology, Harvard Medical School; and Howard E. Ruggles, M.D., Roentgenologist to the University of California Hospital and Clinical Professor of Roentgenology, University of California Medical School. Third edition, revised. 226 illustrations. Cloth. Price, \$5.00. Lea and Febiger, Philadelphia and New York, 1926.

Any work on roentgen interpretation, if written by a man of experience is a valuable addition to a library. This work by trustworthy authors is exceptionally good, even though it is not comprehensive. It does, however, epitomize the principal points in roentgen-ray diagnosis and cover the essentials of the subject. The illustrations are good. Some of them, as the authors state, have been chosen as typical lesions, whereas others present only momentary phases of constantly changing and extremely

variable processes. The beginner, therefore, should not attempt to make his diagnosis by comparison of his own films with those reproduced in the text. The authors have well emphasized the necessity of having a thorough knowledge of pathology as a fundamental requisite to success in roentgenographic work. The student should lose no opportunity to correlate the roentgenographic evidence and interpretations with anatomic findings whenever it is possible. Constant collaboration with the other branches of medicine and surgery is equally necessary and profitable.

**COMPEND OF DISEASES OF THE SKIN.** By Jay Frank Schamberg, A.B., M.D., Professor of Dermatology and Syphilology Graduate School of Medicine, University of Pennsylvania, etc. Seventh edition, revised and enlarged with 119 illustrations. Cloth. Price, \$2.00. P. Blakiston's Son and Co., Philadelphia, 1925.

This is the seventh revised and enlarged edition of a well known compend of diseases of the skin by a well-known teacher and author. It is designed for the use of practitioners and students as a rapid reference work and as a key to the study of dermatology. It certainly serves its purpose well.

**COMPEND OF OBSTETRICS.** By Clifford B. Lull, M.D., Instructor of Obstetrics, Jefferson Medical College, Philadelphia; Assistant Obstetrician to the Maternity Department, Jefferson Medical College Hospital; Attending Physician, Department of Gynecology and Obstetrics, Philadelphia General Hospital, etc. Tenth edition, with 84 illustrations. Cloth. Price, \$2.00. P. Blakiston's Son and Co., Philadelphia, 1925.

This is the tenth revised edition of a small practical volume which contains the best knowledge of present day obstetrics. It deserves its present popularity.

**CONCEALED TUBERCULOSIS.** By George Douglas Head, B.S., M.D. Cloth. Price, \$2.00. P. Blakiston's Son and Company, Philadelphia, 1924.

This is a plea for the recognition of concealed tuberculosis which produces physical and nervous exhaustion, the exact nature of which may be overlooked. The author says that this type of tuberculosis fails of recognition unless specific tuberculin tests are used in establishing the nature of the infection. Numerous cases are reported, with clinical and bacteriological findings and the result of treatment. The book is not only interesting but timely and can be read with profit by any general physician.

**OLD AND NEW VIEWPOINTS IN PSYCHOLOGY.** By Knight Dunlap, Professor of Experimental Psychology in the Johns Hopkins University. Cloth. Price, \$1.50. St. Louis: C. V. Mosby Company, 1925.

This small book represents lectures delivered at Johns Hopkins University and at other places. The book contains five chapters, as follows: Mental Measurement; Present Day Schools of Psychology; Psychological Factors in Spiritualism; The Psychology of the Comic; and The Reading of Character from External Signs.

**THE SCIENCE AND ART OF ANESTHESIA.** By Colonel William Webster, D.S.O., M.D., C.M., Professor of Anesthesiology, University of Manitoba Medical School; Chief Anesthetist, Winnipeg General Hospital, etc. Illustrated. Cloth. Price, \$4.75. St. Louis: The C. V. Mosby Company, 1924.

This book is intended for the medical student and general practitioner. It is a well written manual and fairly well illustrated. It will not take the place of the larger and more comprehensive works on anesthesia, and in particular the works that will be sought by those who make a specialty of anesthesia, but it will serve a useful purpose for those who only occasionally give an anesthetic and as a guide to others who may want to know something about the rudiments of anesthesia, even though they do not expect to give an anesthetic themselves. Two of the



most interesting chapters are those upon the "Patient's Viewpoint," and "The Art of Anesthesia."

**CHEMISTRY FOR NURSES.** By Freus N. Peters, A.M., Ph.D., Instructor in Chemistry in Kansas City Central High School for twenty-three years, etc. Second edition. Illustration. Cloth. Price, \$2.50. St. Louis: the C. V. Mosby Company, 1923.

This is the second edition of a book on chemistry intended for nurses, and it has been written so simply that all may understand, with special emphasis on the practical phases of chemistry. A variety of tables have been added near the end of the book as an appendix.

**INDIGESTION.** By Arthur L. Holland, M.D., Assistant Professor of Clinical Medicine, Cornell University Medical College. Cloth. Price, \$1.25. D. Appleton and Company, New York and London, 1926.

This book is intended for the lay reader, and should prove very interesting as well as useful. There are chapters on symptoms, the food phobias and idiosyncrasies, irregularity of the bowel function, gastritis, and notes on general hygiene exercise. Special emphasis is placed upon hygiene, including appropriate exercises.

**LECTURES ON NUTRITION.** A series of lectures given at the Mayo Foundation and the Universities of Wisconsin, Minnesota, Nebraska, Iowa, and Washington (St. Louis), 1924-1925. Illustrated. Cloth. Price, \$2.50. Philadelphia and London: W. B. Saunders Company.

Like all the other Mayo Foundation lectures, these are excellent. They include a large portion of the research work in the field of nutrition. The statements made are by competent authorities concerning our present day knowledge of the most important problems of nutrition. The book is up to date and will be found of interest to professional and lay public alike. This is especially true concerning chapters on our knowledge of vitamins, a subject about which there is a good deal of misinformation in the public mind.

**LECTURES ON HEREDITY.** A series of lectures given at the Mayo Foundation and the Universities of Wisconsin, Minnesota, Nebraska, Iowa, and Washington (St. Louis), 1923-24. 12 mo., 250 pages, illustrated. Cloth. Price, \$2.50. Philadelphia and London: W. B. Saunders Company, 1925.

These lectures discuss the general problem of heredity, including that of sex and acquired tendencies, and the relation of heredity to the occurrence of cancer. A final chapter is devoted to eugenics. Like all the other Mayo Foundation lectures, this is instructive and trustworthy in the information furnished. The lectures cover research work in the field of heredity. The book is intended for lay as well as professional reading.

**ELEMENTS OF PATHOLOGY.** By Aller G. Ellis, M.Sc., M.D., Rockefeller Foundation Visiting Professor of Pathology and Director of Studies, Medical Department of Chulalongkorn University, Bangkok, Siam. 95 illustrations. Cloth. Price, \$5.00. Philadelphia: B. Blakiston's Son and Company, 1926.

This is a book for the beginner in pathology. The book also will be useful to physicians, and especially those who desire to make postmortem examinations. It is not a comprehensive work, and yet it is concise and covers the ground as thoroughly as is possible with a volume of very limited size. Most textbooks are too technical for the student, and it is with a view to remedying such a defect that the author has prepared this book, and it has been written in such a way that the student can understand. The author has not lost sight of the close relation of pathology to the problems of internal medicine and surgery. We especially recommend the book for the purposes for which it is written.

**MANUAL OF PROCTOLOGY.** By T. Chittenden Hill, Ph.B., M.D., F.A.C.S., Instructor in Proctology, Harvard

Graduate School of Medicine; Surgeon to Rectal Department, Boston Dispensary, etc. Second edition, thoroughly revised. Illustrated with 101 engravings. Cloth. Price, \$2.50. Lea and Febiger, Philadelphia and New York, 1926.

This is the second edition of a small volume that should prove instructive to general physicians and students, particularly the latter. It is a safe guide.

**HYGEIA, OR DISEASE AND EVOLUTION.** By Burton Peter Thom, M.D. E. P. Dutton and Company, publishers, New York, 1926.

This is one of the essays of the "Today and Tomorrow" series. The author considers disease an element in biologic evolution, and an analysis of the subject leads him to the conclusion that disease is actually conducive to health in that it includes in its processes those that bring about its extinction to the defensive mechanism invoked in its victims who survive its onslaught. He thinks eventually man will become immune from it, and that it should not be considered necessarily man's punishment for violating nature's law.

**COLDS, THEIR CAUSE, TREATMENT AND PREVENTION.** By Russell L. Cecil, M.D., Assistant Professor of Clinical Medicine in Cornell University Medical College, New York City. Cloth. Price, \$1.00. D. Appleton and Company, New York and London.

This book is intended for the layman but will be found interesting to the medical man. In it is discussed the cause, prevention, and treatment of the common cold. The treatments outlined are those that the author has found most efficacious and which are most easily applied by the layman. The author attempts to show the layman how to treat and how to prevent colds.

**THE PRACTICAL MEDICINE SERIES. GENERAL MEDICINE.**

This is a year's review of general medicine, and constitutes one of the "Practical Medicine Series" comprising eight volumes on the year's progress in medicine and surgery. As usual it includes abstracts of the latest and most progressive ideas concerning medicine that have been offered in literature throughout the past year. The book is invaluable to the physician who desires to epitomize the year's progress and has only time for reading a digest of what has occurred throughout the year.

**MATERIA MEDICA AND PRESCRIPTION WRITING.** By Oscar W. Bethea, M.D., Ph.G., F.C.S., Professor of Clinical Therapeutics, Tulane School of Medicine, etc. Fourth revised edition. Cloth. Price, \$4.50. F. A. Davis Company, Philadelphia, 1926.

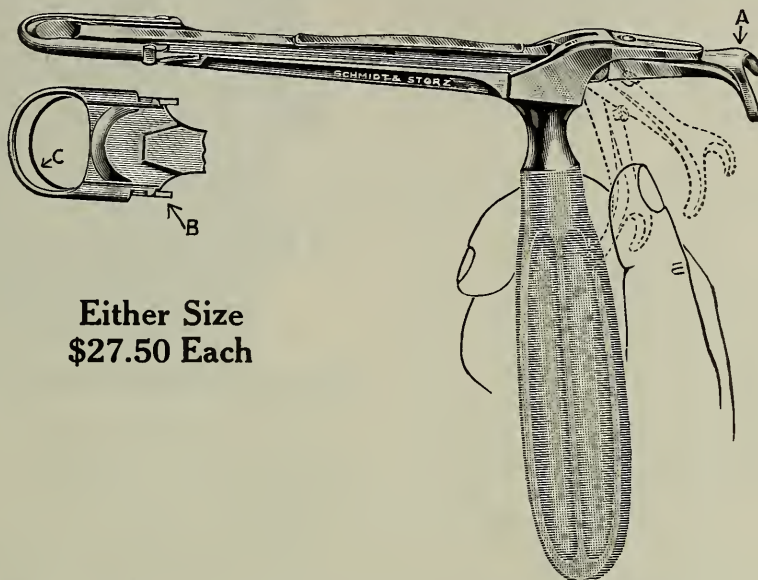
This is the fourth revised edition of a well known work. Much new material has been added and many changes made concerning new drugs as well as drugs formerly included. Drugs that have fallen into disuse have been omitted. Special attention has been given to the matter of prescribing preparations that best meet the demands of particular conditions, and the precaution to be observed in employing them, and how to prescribe them correctly. Attention also is given to the question of the most convenient and agreeable administration of drugs, and the time when they will produce their best effects. In every way the work is a practical one that will be appreciated by student and practitioner alike.

**PRACTICAL DIETETICS IN HEALTH AND DISEASE.** By Sanford Blum, A.B., M.S., M.D., Head of the Department of Pediatrics, and Director of the Research Laboratory, San Francisco Polyclinic and Post Graduate School. Second revised edition. Cloth. Price, \$4.00. F. A. Davis Company, publishers, Philadelphia, 1926.

The name describes the work. In this second edition there is some added special chapters concerning dietetics in relation to vitamins and insulin therapy. As in the former edition, the present one gives detailed dietary for

(Continued on Adv. Page xx)

Reprint from The Laryngoscope—October, 1926



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### MOLT AND STORZ MODIFICATION OF THE TONSIL GUILLOTINE Dr. Wm. F. Molt, Indianapolis

All who use the Sluder method of tonsil enucleation realize that the most satisfactory and complete enucleation can only be had by the use of a blunt bladed instrument. Such an instrument must of necessity have a perfect seating of the blade into the ring end of the guillotine in order to completely detach the connective tissue that holds the tonsil in its bed. Numerous appliances, mechanical dogs and double bladed instruments have been placed on the market to accomplish this purpose, but in my hands none of these have proven satisfactory.

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The blade and carrier have been so constructed that this instrument takes up much less space in the mouth than the ordinary guillotine. I have used this guillotine in a large number of tonsillectomies and so have a number of my associates, with perfect results. The instrument is made in two standard sizes, regular and large.

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# BOOK REVIEWS

(Continued from Page 88)

individual patients, with suggestions concerning diets that should be individualized for particular cases. Most people ignore a proper diet in health as well as in disease. One reason for this is the prevalent misconception of the value and usefulness of certain foodstuffs. Even doctors oftentimes possess little knowledge concerning this matter. This book will prove invaluable to them as it also will prove of great help to any one who is called upon to prescribe for sick people.

**NEPHRITIS.** By Herman Elwyn, M.D., Assistant Visiting Physician, Gouverneur Hospital, New York City. Cloth. Price, \$5.00. The MacMillan Company, New York, 1926.

As the author well says, "Our knowledge of the diseases comprised under the term 'nephritis' has been considerably advanced during the last twenty-five years. For this progress we are indebted to those investigators who have aided in the development of proper methods in blood chemistry and a detailed study of the pathological histology of the kidney, and in the advance of our understanding of the physiology of the kidney." In this book the author presents the individual forms of nephritis, with an attempt to correlate the clinical phenomena with the pathological changes. As a necessary preliminary to such a presentation he has discussed the normal function of the kidney, renal insufficiency, hypertension and uremia. In discussing the kidney of pregnancy he has ventured to offer a new explanation for the occurrence of eclampsia which he believes to be due to arteriospasm which he places on a physiological basis. There are interesting chapters on hypertension, the pathology, etiology and pathogenesis of arteriosclerosis, and special chapters on renal arteriosclerosis both with and without renal insufficiency.



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## ORIGINAL ARTICLES

### ARTERIAL HYPERTENSION\*

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The great German physiologist, Ludwig, is credited with the statement that the discovery of the blood pressure was a greater discovery than that of the circulation of the blood. While discussions of the relative importance of great discoveries usually lead neither to unanimity of opinion nor to any other fruitful result, it is of interest that Ludwig ranked the labors of the English clergyman, Stephen Hales, and of his successors, von Basch, Potain and Riva-Rocci, with the discovery of the immortal Harvey.

In health, as in disease, three factors enter into the production of the pressure within the vessels. First, the force of the heart beat, second, the quantity and quality of the blood, and third, the peripheral resistance. High blood pressure may be the result of an increased output of the heart, an increased viscosity of the blood or of a constriction of the peripheral vessels.

An increased cardiac output may at times produce an increase in blood pressure, and certain cases of polycythemia,—a disease associated with an increased viscosity of the blood, show an elevation of blood pressure; yet the evidence is constantly accumulating that in the vast majority of cases high blood pressure is due to an increase in the peripheral resistance produced by a constriction of the arterioles or capillaries.

One of the earliest theories advanced to explain the origin of hypertension was that of Traube and Cohnheim, who believed that an increased resistance to the blood flow in the renal vessels was produced by arterial disease of the kidneys and that this increased resistance produced a rise in the general arterial pressure. This point of view found much support particularly among clinicians who were constantly seeing the association of high blood pressure with Bright's disease.

Katzenstein, however, showed that complete occlusion of the renal arteries produced no in-

crease in blood pressure, and Senator found that when emboli were produced in the small renal arteries by the injection of paraffine no hypertension resulted. These experiments dealt a staggering blow to the Traube-Cohnheim theory and made necessary the assumption of a diffuse and generalized resistance to the blood flow throughout the entire vascular system to explain hypertension.

The investigations of the past ten years have tended more and more to show that the rise of blood pressure, even in acute glomerular nephritis, is of extrarenal origin and due to constriction throughout the entire vascular tree. As Schlayer has remarked, the elevation of blood pressure in these cases may as well be due to changes in the blood vessels of the skin as in those of the kidney. Kylin, one of the most indefatigable workers on the subject of hypertension, has been so impressed by the diffuse vascular changes, particularly those in the capillaries, that he has suggested the use of the term "capillaropathia acute universalis" to replace the old term, acute glomerulonephritis.

We may then regard as fairly well proved the assertion that a rise in blood pressure is not due as at one time assumed, to lesions in the kidney, but is due to a fairly diffuse increase in peripheral resistance occasioned by changes throughout the vascular system. Does this mean that hypertension is due to a diffuse arteriosclerosis?

The association between arteriosclerosis and high blood pressure is so common that one naturally suspects the existence of high blood pressure in every patient with a marked arteriosclerosis. A further study of this subject will convince us, however, that this idea is incorrect since we encounter in our practice many patients with a marked arteriosclerosis who have normal blood pressures. Osler remarks that "a low or normal pressure may be present in extremely sclerotic vessels."

When, however, we study the question as to whether all cases of high blood pressure show some arteriosclerosis, we find some differences of opinion. Fishberg found, in seventy-two cases of essential hypertension coming to necropsy, that

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lesions of the terminal arterioles (arteriolo-sclerosis) were invariably present. O'Hare and Walker found that the retinal arterioles seen ophthalmoscopically are usually thickened in essential hypertension. Pal and von Monakow, however, have described cases of essential hypertension in which neither renal or arteriolar lesions of consequence were found at autopsy. While it is true that the great majority of cases of hypertension at autopsy show sclerosis of the arterioles of the kidney, pancreas, spleen or brain, yet as Jores pointed out these changes are often so slight that they could hardly explain the hypertension. Von Monakow has emphasized that in many cases of hypertension the arterial lesions are no more extensive than in individuals of the same age who have no hypertension. In our own experience arterial or arteriolar lesions have almost invariably been found at autopsy and usually but not always on ophthalmoscopic examination.

While arterial changes are usually found in arterial hypertension, this by no means proves that they are the cause of the arterial hypertension. It is perhaps more reasonable to assume that they are often the result of the arterial hypertension.

Autopsy findings do not give us the answer to this problem since autopsy findings are obviously end results. Nor do the results of ophthalmoscopic examinations solve the problem for us, since most patients when first seen have had hypertension for some time before examination and the thickening of the retinal vessels may be the result of the hypertension rather than cause. Hueck has said that the existence of hypertension for more than a few weeks can usually be read in the arterial walls.

In addition to this clinical and pathological evidence there is experimental evidence that a hypertension may lead to lesions of the blood vessels. Adrenalin, which will produce a transient hypertension, causes on repeated injections blood vessel lesions, and ergot, one of whose active principles is the powerful pressor substance tyramine, produces arterial lesions after leading to an endarteritis with gangrene.

When we summarize all the evidence that has been presented it seems fairly well established that lesions of the kidney, as well as lesions of the arteries, fail to explain the genesis of arterial hypertension. A large percentage of our patients with hypertension show either kidney or arterial lesions, yet some fail to do so, and we also see patients with extensive renal or vascular lesions who show no arterial hypertension.

There is, however, excellent evidence that the arterioles and probably the capillaries are vitally concerned in the production of an arterial hypertension. Although the vessels do not have to be anatomically diseased they are probably in a state of contraction. The disturbance is functional or physiological but not necessarily anatomical.

The observations of Weiss and of Otfried Muller are of great interest in relation to this problem.

These observers, who have been investigating the microscopic appearance of the capillaries in various diseases, believe that they show definite alterations in patients suffering from hypertension. Muller has described many patients with arterial hypertension who show a marked constriction of the arterial end of the capillary loop with dilatation and twisting of the venous end. In these patients Muller emphasizes the absence of renal or vascular lesions.

Clinically, the evidence in favor of arterial hypertension being the result of a vascular spasm is seen in patients either with or without arterial lesions, who show transient states of hypertension. If a patient with arteriosclerosis shows for a time a hypertension and then later, without cardiac failure, a normal blood pressure, it seems reasonable to assume that the hypertension was the result of vascular spasm and not of vascular sclerosis.

The view of a great many workers is expressed by von Monakow, who states, "The lasting elevation in blood pressure is always caused by abnormal contractions of the arterioles in extensive vascular areas."

What then causes these contractions? Kylin assumes that the cases of arterial hypertension of the so-called essential type are due to disturbances of the autonomic nervous system, and Muller writes in a similar vein. This view is probably correct at least in many instances. The nervousness of hypertensives is almost proverbial.

Von Monakow, discussing the causes of the arteriolar constriction, believes that they may be due to various causes, nervousness, disturbances of the internal secretions, poisons, and kidney lesions. He lays great stress upon some "spastic component" even in explaining those cases where there are extensive arteriolar lesions.

Batty Shaw, in a very stimulating book, "Hypertropiesia and Hypiesis," discusses the theory that a pressor body of protein origin is liberated into the circulation and produces an elevation of the blood pressure, but he adds that "so far to date no metabolite has been discovered which is pressor in type."

Three years ago we began a systematic study of the urine in search of some substance which had a pressor effect and found that the guanidine bases had the power of producing a marked and sustained rise in blood pressure. A search of the literature revealed the fact that a similar observation has been made previously by Loewit, and by Bovshik and Sinalcinoff. Previous observers, notably Kutscher and Lohmann, Achelis and Engeland, had described the presence of guanidine compounds in the urine but made no reference to any pressor effect, and most of the interest in these substances was aroused by the work of Noel Paton and his co-workers, which suggests that it is the toxic substance concerned in the production of tetany parathyriopriva and of idiopathic tetany.

We have studied the excretion of the guanidine bases in normal individuals, in cases of essential hypertension, and in chronic nephritis. In our patients suffering from chronic nephritis with hypertension we have usually found a diminished output of guanidine bases as compared with normal controls. The group of patients diagnosed as essential hypertension have shown in many instances a marked decrease in the output of guanidine bases, while others have shown a fairly normal daily excretion. We have also made the observation that some patients with arterial hypertension, while under treatment with digitalis and diuretics, show a marked increase in the output of guanidine coincident with a fall in pressure.

These observations suggest at least that guanidine may be one of the "spastic components" referred to by von Monakow, which plays an important role in arterial hypertension. It may, of course, be only one of a group of substances that are concerned, and it is unlikely that it is the cause of all the hypertension we see. If "high blood pressure is a symptom, which, similar to fever has no uniform etiology," (von Monakow) then we would hardly attempt to ascribe all cases to the same cause.

If our later studies and those of colleagues show that guanidine is a factor in the pathogenesis of certain cases of arterial hypertension we will at least have gotten hold of one thread that may help us unravel a very much tangled skein.

Coincident with our work on guanidine hypertension we began a study of various substances that would reduce this experimental hypertension. One of the most effective were certain extracts of liver whose preparation and pharmacological action have been described elsewhere. Macdonald, and James and Laughton have also carried out extensive experimental and clinical work upon this subject.

The depressor effects of certain tissue extracts have been known for more than thirty years, but these effects have usually been attributed to the presence of two well known depressor substances, histamine and choline. The liver extract with which we have worked is apparently free from both these substances, and the extract of James and Laughton also gives no tests for their presence. More recently Vincent and Curtis have given evidence that extracts of tissues have a depressor action which is not due to either histamine or choline.

The liver extract with which we have worked is non-toxic and contains a very small amount of nitrogen, but is relatively unstable and loses its potency under conditions as yet poorly understood. There are also certain theoretical and clinical considerations that lead us to believe that it is not of sufficient potency for the treatment of certain cases unless a very large and rather impractical dosage is employed. We have, however, although fully aware of these two handicaps, employed it in

the treatment of a comparatively large series of patients.

It is too soon to draw definite conclusions from this series. Certain impressions and results, however, are sufficiently definite to be presented.

An immediate depressor effect of the liver extract in most patients suffering from arterial hypertension is observed, if a sufficient dosage is employed. The dose necessary to produce this effect varies greatly with the patient, one hundred units being sufficient in some patients while others may require one thousand units at a single injection. This fall of pressure is accompanied as a rule by no disagreeable symptoms, but on the contrary a sense of relaxation and well-being. The fall in pressure varies in its duration from one to four or five hours and in some instances longer. Many patients then show a gradual rise to the original level while others do not come back, and a second injection four or five hours later reduces the pressure to a still lower level.

Certain patients are, however, refractory to injections and show little or no fall even with large doses. This, however, is not particularly surprising since such patients usually show no fall in pressure when such depressor substances as the nitrites are employed.

The results obtained when patients are subjected to repeated daily injections are obviously more difficult to interpret. Some patients have never shown any more than immediate falls in pressure although they have been under treatment for a year or more. They have continued the treatment because they have had relief from disagreeable symptoms, insist that they feel better, and state that their old distressing symptoms recur as soon as they leave off treatment.

Certain patients, after repeated injections, show some fall in pressure, not to normal, but to a level where they are free from disagreeable symptoms, while many others show a fall in pressure to normal with a complete relief from all symptoms.

The patients whose pressures have fallen to normal show such a fall after varying intervals. Some patients show such a fall in two or three days, while others do not reach a normal level until a month or two months have passed. The dosage necessary to produce such a fall also shows wide variations. In one patient one hundred units per day may suffice, while another may require five hundred or even a thousand per day.

The most gratifying results have been obtained in relatively young individuals who showed no marked evidence of arterial disease and whose hypertension was apparently of brief duration. Many patients, whose blood pressure could be reduced to nearly normal only by absolute bed rest, have shown a fall to normal and have continued normal even when quite active after taking liver extract regularly.

Patients with very high systolic and diastolic pressures of long duration have unfortunately



shown little more than temporary falls in pressure. We do not yet know whether they are refractory to treatment because of organic blood vessel disease, or whether the dosage employed is insufficient. There is some evidence that in certain patients the latter explanation is correct.

In conclusion a word of warning must be uttered—not of danger from the treatment for we have not yet lowered any pressure to a subnormal level, but of danger from conclusions. In no disease more than in hypertension is "experience fallacious and judgment difficult" when it comes to summarizing results of treatment.

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#### DISCUSSION

V. H. MOON (Indianapolis): I think we are fortunate in living in the period in which we do, even more fortunate than to have lived in the period from 1880 to 1890, when the foundations for medical science were being laid, for the present decade is bringing forth many things which when compared with the work in 1880 to 1890 makes that seem like child's play. Such work as that of Banti, of the Dicks, as that just laid before us, and with the many other accomplishments on this

continent in the last six years, makes us realize the rapid progress that is being made. It is an interesting feature that the universities and research institutes of Europe are beginning to look to the west as the inspiration of life. A returning professor who had spent nine months in Europe told me that the professors there admitted voluntarily and freely, that the European schools now recognize American institutions and American workers as leading the world in scientific research.

I am greatly interested in the remarks of Dr. Major regarding metabolites, and the other feature of his work in reducing that pressure with certain organ extracts. I am also interested in another feature, since we are coming to realize that the syndrome of cardio-vascular disease is made up so that each feature is related casually to each other feature. Dr. Major has shown us what the probable causal relation is between hypertension and some metabolites. It would be interesting if some experiments were carried out to show the relation between these and certain types of arteriosclerosis. Dr. Major told us that the type in which the medial coat of the arteries are involved is not associated with hypertension, but the atheromatous type frequently is associated with high blood pressure. Dr. Major elsewhere has shown that the effect of the methylguanidin is to produce constriction of the arterioles, so that the ear of a rabbit will become blanched soon after an injection, and also that the retinal vessels will become blanched, indicating, if not proving, that the effect has been to produce a constriction of the arterioles. Can you imagine what would happen in the wall of an artery in which the wall is made up like this (illustrating on blackboard)? What would be the effect if the small arterioles of the vasa vasorum were kept in a continued condition of tonic constriction? It would be to maintain the area of vessel wall supplied by those arterioles in an anemic state. That area would degenerate. It would go through the successive changes of swelling, fatty changes, necrosis and calcification; those are just the changes which take place when the arteries begin to show the effects of the condition known as cardio-vascular-renal disease. It is entirely possible that this produces atheromatous degeneration of the artery wall by the strangling of the vessels which nourish the arterial wall and maintain it in normal condition.

If I had a little longer time I would like to take up further analysis of this and show that there are hydro-dynamic factors involved in the wall of the great vessels which are possible factors in the production of an anemic condition in the wall of the vessel. If an area in the vessel wall is so rendered anemic we can readily understand how an arteriosclerosis of the atheromatous type would be the result.

I wish to congratulate you all for having been present at the presentation of this admirable piece of work.

J. H. P. GAUSS (Indianapolis): We have listened to a very excellent presentation of the subject of hypertension by Dr. Major. Dr. Major, I am sure, has no intention of closing the question of hypertension as to etiology or treatment but wishes merely to present to us one phase of the entire question. He has gone over the various theories held from the day when it was thought that hypertension was due to sclerosis of the kidney vessels to the present time, when the theory is that probably the sclerosis is a process secondary to hypertension and it in turn is a result of persistent spasm of the blood vessels not only of the kidney but of the systemic vessels as well. It was with the hope of determining that this spasm was caused by retention of some of the guanidine bases by an inefficiently functioning kidney that his work was undertaken.

I have been much pleased with Dr. Major's fair and scientific way of presenting his reports. There is only one flaw, I think, in his theory and that is that in such cases one would expect to find an increase in the blood guanidine comparable to an increase in other retained metabolites in chronic nephritis. This has, however, never been demonstrated. Dr. Major has himself called attention to this missing link in the evidence and has suggested that the retained guanidine may be changed into other substances, possibly urea. This requires further work.

If we go into the various causes of increase in blood pressure we can name, among other things, the excessive use of proteins and of salt; the acute and chronic infections, as scarlet fever and lues; the chronic intoxications, as lead and alcohol; the influence of heredity and modern living conditions. I think the general feeling of the profession is that salt can be given safely in moderate amounts and does not need to be restricted as much as Dr. Allen believes and practices. Some workers have seemed to prove that hypertension can be brought about by the excessive use of proteins while others have apparently as successfully disproved it. As one reads the literature one's attention is called more and more to the influence of heredity and of the stress and strain of modern life. Is hypertension actually on the increase or only apparently so due to the fact that we are making better diagnoses; or is it because by having decreased the mortality in early life we are saving patients to be attacked by the diseases of later life—Bright's disease, carcinoma and hypertension? O'Hare analyzed a series of cases and showed that the incidence of a family history of heart and kidney diseases, of cerebral accidents and of arteriosclerosis is almost twice as great in the hypertensive cases as in the controls and that in almost one-half of the hypertensives he got a history of vaso-motor weakness or of an emotional temperament. He assumes that there may be in certain families a vulnerability of the heart and vascular system just as in other families there is a vulnerability of the pancreas in diabetes. I be-

lieve that the stress and strain of modern life is very important, and not enough talked about or thought of and I am glad to see that Dr. Emerson will touch upon this tomorrow.

The endocrines have been blamed for almost everything and also for hypertension, and yet no conclusive report has ever been made by any one to prove or disprove this theory.

Normal tension is the result of two factors, (1) the force of the heart beat, and (2) the peripheral resistance. Starling demonstrated that a reduction in the amount of blood going through the vaso-motor center in the medulla brought about a compensatory rise in the systemic arterial pressure through systemic vaso-constriction. Bordley and Baker found that there is invariably an arterio-sclerosis in the arteries of the medulla in men with hypertension and not in the controls who had a normal pressure, thus suggesting that a localization of the arterio-sclerotic process in the medulla may be the essential factor in the production of a systemic hypertension. As a corollary and as a seeming proof of this contention Loewy cites eight patients with hypertension in which the pressure could be reduced either by inhalation of oxygen or by going to a lower altitude. He suggests in these cases that the hypertension is caused by irritation of the vaso-motor center by a local deficiency of oxygen.

The treatment of the so-called malignant hypertension is practically nil as these cases are usually hopeless. For the rest all of the usual measures we have used in the past are still of value today, and I feel that while liver extracts do sometimes give splendid results, in the general run of cases they will not prove of more value than the measures we have used in the past. These are rest, avoidance of physical, mental and psychic strains, diet, non-specific protein therapy, hot baths and moral encouragement. Among the drugs used are luminal, the nitrites and potassium iodide. The Germans have recently suggested the intravenous injection of hypertonic glucose solutions and also one percent sulphur in olive oil intramuscularly.

We might say about hypertension as someone has said about pernicious anemia that we do not know what causes it or what to do for it. This is, however, not altogether true, for although our progress has been slow and rather discouraging it is through such work as Dr. Major is doing that we may hope to ascertain the fundamental conditions that are at the bottom of it. I wish to congratulate Dr. Major on his painstaking efforts, and the enthusiasm that he has shown in his work.

WILLIAM A. FANKBONER (Marion): This is a refreshing paper presenting new work. As has been stated, we do not fully understand the causes of hypertension or what to do for its permanent relief and yet that makes its study the more interesting. The pursuit of the cause is what leads us on.



Two things can cause constriction of arterioles. One, non-elasticity from fibrosis and atheroma; the other, hypertonicity of the muscular coat through impulse from the nervous system.

It seems a reasonable deduction that a pervasive infiltration about the vasa-vasorum which could occur in toxic conditions would produce in time a fibrosis or atheroma. This when developed to the stage of being a factor in producing symptoms has become a structural change that is permanent.

Many cases of vascular hypertension exhibit also a nerve hypertension—a lack of nerve stability. How much of this is due to a general toxic state without definite vascular pathology, and how much to gastro-intestinal or colon conditions or emotional disturbances, offers the opportunity for differential study.

It seems to me that one of the impressive things about this work is that there is a sustained relation between vascular hypertension and nerve reaction.

CHARLES P. EMERSON (Indianapolis): I did not arrive in time to hear Dr. Major's paper, but I know his work well and am proud to be on the program with him. His work promises much for the future. Thanks to Dr. Major and the Eli Lilly Company, we were able to use this liver. I have no doubt that it has value; not a great and spectacular value, but enough to make it well worth while. If liver extract contains cholin or histamin it will depress blood pressure, but this is a toxic effect, without benefit to the patient. This liver extract without these poisons does make the patients feel so much better that they complain if they do not get the dose, notwithstanding the soreness of their arm which results. Also the tinnitus aurium often is relieved and that alone makes the treatment well worth while.

It does, under controlled conditions, slowly lower the blood pressure, then, without the patient's knowledge, substitutes normal salt solution and the blood pressure will rise. The emotional life of the patient, however, will more than overbalance the effect of any medical therapy which shows that high. Blood pressure is secondary in more senses than have been suggested today. I am not sure a direct tendency to high blood pressure can be inherited, but I am very sure that mental patterns can be inherited, and that some patterns do lead to physical hypertension. We suspect that mental hypertension indirectly leads to spasm in certain arterial hypertension and to a vicious circle which liver extract may influence. It is not impossible that members of the guanidine group may be retained in the body because of great need of its retention. Chronic constriction of the arterioles leads to hypertension, and if heparmone can retard this, we may upset a vicious circle which mental states and retention of certain metabolites may be segments of this circle.

PAUL W. FERRY (Kokomo): In the cases of hypertension of the menopause those patients

usually respond, the pressure being up one day and down the next, to the endocrine substances, or bromid, or relief of trouble at home. I wonder if Dr. Major has found any improvement from the liver extract that is more pronounced than that obtained by the usual treatment in these cases.

RALPH H. MAJOR (closing): I appreciate very much this generous discussion. I wish to emphasize that the statement made by Monakow, I think, is much to the point and essentially true when he says that hypertension, like fever, has no uniform etiology. He also remarks that hypertension may be due to psychic states, to kidney lesions and endocrine disturbances, and also to disturbances in metabolism. I feel sure that there are many different causes for hypertension, and I think various methods of treatment that are effective in one patient may not be effective in another. The whole discussion in the literature reminds me much of the discussion regarding fever one hundred to one hundred and fifty years ago. They would give quinine to one patient with fever and he would clear up; then they would give the next one quinine and it would have no effect upon the fever. Now we understand why. We know that the one patient had malarial fever, the other typhoid or some other long continued type of fever.

Guanidine may be a cause of hypertension, but it is probably only a representative of a group. It is quite possible that tyramin and other amines may be concerned.

The question was raised as to whether liver extract offers any advance over other treatments, such, for example, as rest. We have found that many patients who maintain a normal pressure while in complete rest will continue normal when they are up and about and taking liver extract. If this is a fairly general result of treatment, the treatment, I think, will be well worth while.

I have been very much interested in Dr. Emerson's description of the relationship of the emotional stage to hypertension. This is a subject of extreme importance and one which complicates greatly our attempts to draw conclusions from treatments.

The hypertension of menopause probably belongs to the group of endocrine disturbances. These cases are usually fortunately benign.

I wish also to emphasize that the liver extract is not specific against guanidine but acts against other substances producing peripheral vasoconstriction, such as ephedrin and tyramin.

#### SINUS INFECTION\*

OCULAR MANIFESTATIONS

BERNARD J. LARKIN, M.D.

INDIANAPOLIS

The close anatomical relationship between the accessory nasal sinuses and the structures of the

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eye has been demonstrated as also the facts with reference to focal infection as it concerns these structures. While our present conception of focal infection is now generally accepted, it is nevertheless a rather recent one; hence it is not surprising to find that it is only within the past two decades that disease of the accessory sinuses has been assigned as an important etiological factor in ocular disturbances. With the recognition of the possibility that visual disorders may arise from infections of the nasal sinuses, the literature on this subject has reached immense proportions and numerous cases have been reported in which the causal relation of sinus infections to various forms of ocular disease has been proved beyond a doubt. Indeed, in many reported cases serious visual disturbances have vanished most dramatically following appropriate treatment of an associated nasal accessory sinus involvement, marked improvement having been noted in as short a time as forty-eight hours after a nasal operation.

As an illustration of such an occurrence, E. C. Ellett<sup>1</sup> reports the case of a woman, aged thirty-five, who noticed on walking that her vision was much blurred. A yellowish discharge came from the left nostril. When examined the left eye was blind. A roentgen ray examination showed the left frontal, ethmoids, and antrum filled with granulations or pus. The sphenoid sinus was also cloudy. Puncture of the left antrum produced a tablespoonful of pus. The ethmoid cells were soft and contained pus, as did also the sphenoids. Two days after exenteration of the sinuses the patient could count fingers with the previously blind eye and the improvement continued. A month later vision was 20/20 minus 2 and J. I. in each eye.

Dawson<sup>2</sup> reports a case in which the vision began to improve in two days following a submucous resection and curettement of the ethmoids, and in four days had risen from perception of light to normal. In a case cited by Place<sup>3</sup> vision improved following irrigation of the sinuses, from 2/200 and 3/200 to 15/50 and 15/200 in two days.

The frequency with which eye affections are associated with infections of the nasal accessory sinuses has been studied by a number of observers. For example, Magitot<sup>4</sup> in a series of 100 cases of kerato-conjunctivitis in an ophthalmic center found ninety-five percent suffering from nasal lesions. H. Maxwell Langdon<sup>5</sup> analyzes a series of cases of ocular disease with relation to focal infections. He found that of six cases of acute uveitis, five were due to sphenoid or ethmoid involvement; four cases of retrobulbar neuritis were all due to sphenoid involvement: of two cases of retinochoroiditis, one was due to sphenoid hyperplasia; there was one case of neuroretinitis, with tonsillar infection as a cause. This author points out that it can be readily seen that there is no definite connection between the site of the original

infection and the type of ocular inflammation and that the diagnosis of the ocular disease will not *per se* enable us to locate the original infection.

In a review of thirty-six cases of optic neuritis reported in the literature, Evans and Fish<sup>6</sup> found twenty-five cases to be of nasal origin. Stark<sup>7</sup>, in a study of eighty-eight cases, found nasal accessory sinus involvement in fifty-two. Elschmig found sinus involvement in only fifteen percent of all optic nerve affections. Edward D. D. Davis<sup>8</sup>, in a series of fifty-four cases of retrobulbar neuritis, found only four with nasal sinus suppuration. In three of these the removal of the middle turbinal and drainage of the posterior ethmoid and sphenoid sinuses was followed by dramatically rapid improvement. In the fourth case, owing to optic atrophy, the results were not so striking.

While most of the ocular sequelae may result from lesions of any of the sinuses, each sinus seems to have a fairly well established adherence to certain of these complications (Weiner<sup>9</sup>). They are as follows:

1. Ethmoid cells: swelling of the inner angle of the upper eyelid, orbital cellulitis, abscess, exophthalmus, diplopia, visual deficiencies, iritis, vitreous opacities, papilledema, optic neuritis and optic atrophy.
2. Sphenoid sinus: optic neuritis and optic atrophy.
3. Frontal sinus: proptosis from mucocele and suppuration, orbital cellulitis and abscess, edema of the lids, diplopia, conjunctivitis, iritis, corneal ulcer, optic neuritis and atrophy.
4. Maxillary sinus: edema of the lower lid, conjunctivitis, orbital cellulitis and abscess, optic neuritis and atrophy.

A study of the literature makes it evident that all manner of extra-ocular and intra-ocular disease is at times traceable to pathology in the accessory nasal sinuses. Gordon<sup>10</sup> has compiled the following list: Edema of the lids, lacrimal disease, conjunctivitis, episcleritis, keratitis disciformia, external rupture of an ethmoidal infection, orbital cellulitis and orbital abscess, displacement of the globe, sympathetic manifestations, involvement of the ocular muscles and uveal tract, cataract and glaucoma, optic nerve manifestations of every possible description from simple temporary blurring of vision to complete optic atrophy. Since the eye symptoms in these various conditions show no special features that are of assistance in determining their origin, the latter must be sought by other methods and means.

From the standpoint of the oculist it is most important to ascertain the cause of the symptoms of which the patient complains, since upon the etiology of the ocular disturbance depends the relief or cure of the patient. It is equally true that where focal infection is suspected it is by no means always an easy matter to determine the location of the focus, since it may be not only in the nasal accessory sinuses but in other parts of



the body, the teeth, tonsils, ears or internal organs, and at times the ocular condition is dependent upon a general infection, such as syphilis, tuberculosis or an acute infectious disease.

If there is a definite pathological condition within the nose of sinuses diagnosis is easy. The finding of nasal obstruction, neuralgic pains in the head and discharge would naturally point to the sinuses as the most likely origin of the disturbance, especially if supported by x-ray evidence of sinus involvement. Certain less pronounced symptoms, such as feeling of pressure high in the nose, in the region behind the nasal bones, would also be suggestive. Pain in the back of the neck would indicate some trouble within the sphenoid cavity. Often with this the patient may complain of the dripping of mucus or of muco-pus into the naso-pharynx. Though none of these symptoms are very definite, they are nevertheless suggestive (Hays<sup>11</sup>).

Many cases of ocular disturbance are reported, however, in which no local pathology could be found, all local symptoms referable to the nose and sinuses being absent, and then assigning a cause for the ocular disturbance becomes difficult. Under such circumstances the only rational course open to the ophthalmologist is to make a thorough physical examination of the patient, including the tonsils and teeth. When all other possible sources of infection have been eliminated and when a brain condition, syphilis and other systemic diseases have been excluded, it is justifiable to suspect the nasal accessory sinuses, even though they give no evidence of disease. As an illustration of this statement the two cases reported by Falk<sup>12</sup> may be mentioned. The first of these was in a married woman, aged eighteen, who noticed sudden diminution of vision in the left eye. She failed to count fingers and three days later light perception and pupillary reflex were absent, and the outline of the disc appeared indistinct. Although examination of the nose and throat was negative, the ethmoid and sphenoid sinuses were freely opened because of the gravity of the condition. Although no gross pathological condition was found the patient made a rapid recovery after operation. The second patient was a bank clerk, thirty-two years of age, whose visual disturbances were of rather gradual onset, and at no time was there complete blindness. In this case also examination of the nose and throat was negative. Opening of the sinuses, however, was followed by gradual improvement.

Since in the reported cases of associated sinus disease and ocular disturbance, the eye symptoms are so variable, it has been impossible thus far to build up any clinical picture which can be said to be indicative of sinus involvement as the etiological factor. It may, however, be of interest to review the various ocular affections, calling attention to a few features that have been regarded as suggestive.

#### OCULAR MUSCLE INVOLVEMENT

The mildest form of ocular disturbance produced by nasal accessory sinus diseases is asthenopia, associated with frontal headache. This is usually produced by closure of the frontal sinus, rarely by closure of the anterior ethmoid cells. This type of cases was first described by Sluder in 1900. The symptoms are inability to use the eyes for near work because of headache, usually frontal and unilateral, present on rising or manifesting itself soon after; like that of a confined empyema, it is aggravated by stooping or bending. The eye examination may be clinically negligible, or possibly there may be minor refractive errors. The rhinological examination may likewise be negative. The most dependable diagnostic sign is tenderness at the upper and inner angle of the orbit, that is at the point of attachment of the pulley of the superior oblique muscle. This finding is known as Ewing's sign. It is sometimes the only definite indication of nasal pathology. As the impairment of the muscular action becomes more marked, a diplopia may appear, or it may be present from the first. Parker states that the binocular vision may be reduced considerably while the vision in either eye taken separately may be normal. Gordon expresses the opinion that if the oculist will resort to the Ewing test more frequently, especially when a small refractive error is determined, he will avoid many of the complaints that are expressed after prescribing a lens for this type of case.

#### EDEMA OF THE LIDS

Edema of the lids, inflammatory or non-inflammatory, may be associated with nasal sinus disease. The edema in mild and transient cases is more noticeable in the morning, and usually disappears during the early hours of the day. There is a type of case in which there is actual blackening of the lids, suggestive of ecchymoses. Edema of the lids is more often incident to acute inflammations of the anterior ethmoid and frontal sinuses, though Onodi, Posey, Genet and De Schweinitz report cases in which it was associated with antral disease.

#### LACRIMAL DISEASE

Lacrimation epiphora, dacrocystitis, fistula and stenosis of the lacrimal ducts have been observed to be dependent upon a nasal disease. It has been estimated by one authority that ninety-five percent of these cases have a nasal origin. They may be produced by mechanical obstruction of the nasal passages and direct extension of the infection into the lacrimal duct, or by way of the ethmoid, frontal and maxillary sinuses. Not a few cases of recurrence of symptoms following extirpation of the lacrimal sac are due to a chronic inflammatory condition due to nasal infection.

#### THE CONJUNCTIVA, SCLERA AND CORNEA

The occurrence of conjunctival congestion and lacrimation with acute coryza is so common that

it need only be mentioned; chronic conjunctivitis is probably not infrequently due to this cause.

Episcleritis associated with nasal accessory sinus infection is usually of the relapsing type. There are present one or more patches of episcleral injection or edema. De Schweinitz states that this condition usually lasts from two to eight days. That this type of ocular involvement may be the result of direct extension of infection from the nasal sinuses is so evident that there should be no difficulty in assigning the cause.

In frontal sinus empyema there will be congestion of the upper half of the scleral conjunctiva together with edema of the upper lid, while when the maxillary sinus is at fault there will be involvement of the lower half of the scleral conjunctiva and edema of the lower lid. J. Ivimey Dowling<sup>13</sup> stresses the point that in persistent disease of these tissues the maxillary sinus should be investigated, even in the case of negative findings. This writer reports several cases of ulcers of the cornea, in which a rapid cure was effected after directing treatment to the nasal complication. He now makes it a custom to give attention to the nose in the phlyctenular variety of corneal ulceration seen in children.

#### EXTERNAL RUPTURE, ORBITAL CELLULITIS AND ORBITAL ABSCESS

According to Skillern<sup>14</sup>, external rupture of an anterior ethmoid infection is the most frequent form of complication resulting from purulent sinus affection. The point of predilection for the perforation is in the region of the ethmo-lacrimal suture. The pus perforated the lamina papyracea or passes through a dehiscence in this structure and thence to the orbital periosteum. Gordon relates an interesting case coming under his observation in which the patient had been treated for recurrent boils of the upper eye lid. Careful examination revealed a fistula of the frontal sinus, which was successfully treated by appropriate internasal drainage. Where the orbit is involved in a suppurative process it is often necessary to establish adequate drainage of both orbital cavity and nasal sinuses.

That orbital cellulitis and orbital abscess should occur as a result of sinus infection is, of course, not unexpected. In a series of 680 cases of orbital inflammation Birch-Hirschfeld found that about sixty percent were secondary to nasal sinus involvement. He believes the percentage should have been higher. Of the 409 cases considered to be secondary to nasal sinus disease, eighteen showed corneal ulceration, eight panophthalmitis and two glaucoma.

Acute rupture is characterized by a sudden displacement of the globe, usually associated with intense radiating pain, marked edema of the lids, chemosis of the conjunctiva, elevation of temperature and general prostration. In some cases there are cerebral symptoms—vomiting, stupor and retardation of pulse rate. Fluctuation is not evident unless the pus has worked its way well

forward. At a later date the pupil may be dilated and immobile. This type of orbital cellulitis and abscess is usually the result of frontal sinus supuration, though at times the ethmoidal, sphenoidal and antral sinuses open into the orbital cavity. With such involvement of the orbit surgical interference must be prompt to effect liberation of the optic nerve from compression exerted either by the accumulation of pus or by inflamed neighboring structure. If these conditions are allowed to continue the optic nerve is ultimately involved, hence early intervention is urgently necessary (Yerker<sup>15</sup>).

#### DISPLACEMENT OF THE GLOBE

Exophthalmus is often a prominent symptom of cellulitis, but it may also be associated with mucocoele, pyocoele, polypi exostoses and osteoma. It may also be incident to optic neuritis. Elschmig, in speaking of unilateral infections, states that fifty percent of the cases present a slight exophthalmus, measurable by Hertel's ophthalmometer. It is important to determine the cause of this symptom, for while operation may be indicated in exophthalmus due to any of the conditions above mentioned, it is not as immediately urgent as when it is due to the rupture of a nasal sinus infection. Usually the suddenness with which the exophthalmus develops is of assistance in determining its cause.

#### SYMPATHETIC MANIFESTATIONS

It is quite generally accepted as a fact that reflex ocular disease may be attributed to an inflammation of the sympathetic nasal ganglion. Cases are recorded in which blepharospasm, lacrimation and photophobia not relieved by ordinary ocular therapy, have been cured when the associated nasal lesion was adequately treated. Trousseau, in discussing ocular reflex disease of nasal origin says, "I have seen the appearance of an apparently inexplicable unilateral mydriasis follow upon cauterization of ulcers of the nose. There is undoubtedly a true ocular asthenopia of nasal origin."

It is well to bear in mind that paralysis of the third, fourth or sixth nerves may be one of the first signs of cavernous sinus thrombosis, and according to St. Clair Thomson<sup>16</sup> cavernous sinus thrombosis is produced more frequently by sphenoidal disease than by any other cause.

#### DISEASE OF THE UVEAL TRACT

It has been only recently that ophthalmologists have regarded focal infections as an etiological factor in inflammations of the uveal tract. As a result of this new knowledge the diagnosis of luetic or rheumatic or idiopathic uveitis is becoming less frequent, and focal infection is more often assigned as the cause. The first observer to report a case of uveitis secondary to sinus disease was Posey (1897). In his case there was complete loss of vision and shrinkage of the globe.

A number of cases of iritis and choroiditis have been reported as secondary to nasal sinus disease. While there seem to be no particular peculiarities



in the symptoms of these conditions when they are dependent upon accessory nasal sinus involvement, the association occurs with sufficient frequency to warrant the conclusion that no study of a case of iritis or choroiditis is complete which lacks a thorough investigation of the nasal sinuses. A review of the literature would indicate that acute uveitis as well as iritis and choroiditis occur most frequently as a result of ethmoid and sphenoid involvement. Iritis is also due at times to infection of the frontal sinus. It is of interest that the condition has been produced experimentally in rabbits by the intravenous injections of cultures prepared from infected teeth or pulp. In Hayden's<sup>17</sup> experiments, sixty-six rabbits were inoculated with the cultures obtained from fifteen persons suffering from metastatic eye diseases and 68.2 percent developed lesions of the eye. This author concluded the bacteria have some special affinity for the tissues of the eye.

#### CATARACT AND GLAUCOMA

It has been definitely demonstrated that cataract and glaucoma can be influenced by ethmoidal and sphenoidal disease. Cases presenting lens opacities are at times observed in those who for years have been suffering from nasal disease. It has been expressed in a conjectural manner that increased intra-ocular tension may have a nasal origin, but this is a question concerning which no definite conclusion has been reached. However, Wiener and Loeb (1921) report a case in which ocular tension was reduced following an operation on the ethmoids, and repeated application of cocaine to the middle meatus. Be this as it may, opacities have been cleared up by operation on the nasal sinuses. James Albert Morgan<sup>18</sup> cites a case in which vitreous opacities and retrobulbar neuritis of the right eye was followed by great improvement after opening the maxillary sinuses on both sides. This is not a surprising result when we consider that experiments with India ink show the exact route followed by particles from the conjunctival lymphatics along Schlemm's canal, into the anterior chamber and thence into the vitreous.

#### OPTIC NERVE MANIFESTATIONS

The optic nerve manifestations that have been traced to disease of the nasal accessory sinuses include retrobulbar neuritis, optic neuritis, papilledema, choked disc and optic atrophy, enlargement of the blind spot, contraction of the visual field and scotoma. From anatomical consideration it would appear that the ethmoid and sphenoid sinus alone are responsible for optic nerve involvement. There is, however, abundant evidence in the literature to show that such involvement may be secondary to the frontal and maxillary sinuses as well.

It is contended by many observers that pressure is the main factor in the production of retrobulbar neuritis. Others believe it to be due to edema of the optic canal, while still others hold that a direct transmission of toxins into the canal of Vossius and the capillaries supplying the central bundle

is the cause. Stark has recently advanced the theory that the sensitization of the tissues of both the sinuses and the orbit by bacterial toxins produces an allergy resulting in a localized anaphylactic reaction each time an affected individual comes into contact with a fresh infection of the same bacteria in the nose, and possibly in other parts of the body.

Optic nerve involvement may be insidious and gradual in onset; it may be associated with partial or complete blindness and one or more of the following symptoms may be present: Enlargement of the blind spot, central scotoma, contraction of the field of vision, pupillary changes, diplopia, paresis or paralysis, optic neuritis, papilledema, choked disc or optic atrophy. Retinitis, papillitis and optic atrophy are, however, only rarely caused by sepsis of the accessory sinuses. (St. Clair Thomson).

The following case recorded by Sir St. Clair Thomson is fairly typical of many cases reported in the literature:

A young man of twenty-four years developed a retrobulbar neuritis of the left eye of rapid onset. The x-ray examination revealed obscurity of the sphenoidal sinus. Ophthalmic examination showed swelling of the left optic disc, blurring of its margin and obscuration of the retinal vessels. The patient was treated for three days with radiant heat, steam inhalations of menthol and eucalyptus and aspirin, without improvement. Operation of the sphenoid sinuses was performed. On the fourth day post-operatively, both sphenoid sinuses were washed out with warm normal saline and the patient at once noticed an improvement in his vision. Progress was continuous, resulting in cure two and one-half months later. Vision of the left eye was now better than that of the right.

Retrobulbar neuritis usually affects the axial bundle of the orbital portion of the optic nerve. It may be either acute or chronic. The acute form is usually unilateral and is associated with severe headache on the same side. Pain is felt on movement of the eyeball and tenderness on pressing the eyeball backward (Gottlieb<sup>19</sup>). There is a rapid impairment of the sight, first noted as a central blur or scotoma and rapidly increasing until but a narrow peripheral field remains. The fundus shows, as a rule, no abnormalities, but occasionally later a blurring or congestion of the nerve head appears.

The chronic type is more frequent, usually bilateral and may give rise to no symptoms or but slightly reduced visual acuity. It is often discovered accidentally in routine examination of the visual fields as a concentric contraction of the field of color, with or without a relative or absolute central scotoma for forms or colors. The recovery of normal fields of vision is slower than in the acute forms.

The scotomas described by Van der Hoeve are supposed to indicate retrobulbar neuritis due to sinusitis if the scotoma is greater for colors than

for white, and if the scotoma varies during the presence of the infection. This sign, however, is not definitely pathognomonic.

Choked disc is another ocular condition which has only recently been attributed to sinusitis. Cushing<sup>20</sup> still maintains that choked disc *per se* is produced only by intracranial pressure. He says, "Inflammatory processes may affect the optic nerve in such a way as to produce reddening, injection and possibly such a degree of hyperemia and vascularity of the nerve head as to resemble the early hyperemic stage of choked disc, but it is unbelievable that the accessory sinuses should produce an actual choked disc." Several cases have been reported which seem to contradict this statement. For example, C. W. Tooker<sup>21</sup> cites the case of a young girl of twenty-four, in whom ophthalmic examination showed the retina to be edematous, with small hemorrhages of the retinal veins. There was definite bilateral papillitis, elevation of the discs and strabismus. Cranial decompression was considered, but as the x-ray examination showed cloudiness of the anterior ethmoid cells, a rhinological operation was performed. Five days later the discs diminished to about two diopters. Ten days later there was no diplopia, ocular movements were almost normal and from the clinical standpoint the results were most striking.

Sluder also has reported several cases of bilateral choked disc accompanying nasal sinus infection occurring in the practice of several competent ophthalmologists. In one case the swelling measured six diopters in one eye and eight in the other. The neurological examination in these cases was negative, and post-ethmoid-sphenoid operations relieved the condition. Tooker believes the lesion is probably an optic neuritis and that by the ophthalmoscope it may be indistinguishable from that produced by intracranial lesions.

As we have already indicated involvement of the optic nerve may progress to complete blindness. The course and gravity of the neuritis will, of course, depend upon the anatomic conditions, the infectious agent present and the depression due to chronic disease.

#### TREATMENT

Where it can be definitely decided that an ocular affection is dependent upon a sinusitis, the treatment naturally passes to the domain of the rhinologist. The value of trepanation of the ethmoid and sphenoid sinuses in involvement of the optic nerve where there is a possibility that the posterior sinuses are diseased has been proved beyond question. However, some writers, as for example Julien Bourget<sup>22</sup>, think the opening of a healthy sinus (and he claims that a sinus must be considered healthy when there are no objective rhinoscopic signs) is unjustifiable. He points out that the partisans of operation insist upon early intervention in order to obtain good results, that is within the first two weeks, and it is exactly within this time that spontaneous recovery often begins.

De Stella<sup>23</sup> opposes systematization of treatment for these diverse endonasal conditions that may produce optic neuritis. Where there is a normal intranasal appearance on the most complete examination, he advises daily irrigation of the nasal cavities and post nasal space, with perhaps resection of the anterior end of the middle turbinate. Where there is evidence of nasal involvement, he advises removal of the middle turbinal bone, opening and curettage of all the ethmoid cells and opening of the sphenoid sinus if there is evidence of pus. Leon White<sup>24</sup> states that he is treating patients longer and studying them more thoroughly than formerly before operating. Each case is treated by spraying with argyrol and adrenalin about the middle turbinate and employing hot saline irrigations, as it is thought that if the trouble is due to blocking of the nose the shrinkage and drainage following this treatment may produce some improvement in vision. R. Jocsq thinks that before opening the nasal sinuses decongestive methods should be employed, such as resection of the turbinate or part of the septum. When he suspects retrobulbar neuritis he prescribes potassium iodide to increase the serous secretion of the sinuses, so as to dilute or provoke the evacuation of purulent secretion, if any exists. If such an outflow does not occur there is exacerbation of fronto-occipital pains; this seems to favor sinus pathology, and is a sure indication that a nasal vomica is present. In two cases Jocsq has had excellent results from subconjunctival injection of strychnine.

White's experience in treatment proves, he says, that if the optic canal is small, surgical intervention is called for, and that promptly; if it is over 4.5 mm. operation becomes less urgent in proportion to the increase in size.

A number of authorities are of the opinion that unless there is improvement in the eye symptoms under treatment within a week there is danger of permanent impairment of sight, while in cases of more than two months' standing before treatment, little can be expected except checking the loss of vision by the removal of the definite focus of infection. It is quite generally agreed that early operative intervention is more imperative in the presence of total loss of vision than when the loss is only partial. Of course, if there is complete optic atrophy restoration of vision by operative measures cannot be hoped for.

St. Clair Thomson declares that exploratory opening of the sphenoid sinuses without evidences of suppuration in retrobulbar neuritis seems to be warranted from recorded cases when no other cause can be found and the patient is threatened with blindness. It must be remembered, however, that some patients recover without operation on the accessory sinuses and without any definite diagnosis of the cause.

The whole matter of treatment evidently hinges upon the diagnosis. Cases of frank sinusitis, easily recognizable and amenable to intranasal



treatment, should be distinguished from those in which the origin of the optic neuritis remains obscure. In cases of this type the fullest co-operation of the rhinologist, the neurologist and the ophthalmologist is essential in order that the appropriate treatment may be selected. If nasal treatment is required this naturally falls into the domain of the rhinologist and time forbids that we should discuss the details of such treatment at the present time.

#### SUMMARY

The importance of nasal accessory sinus disease as an etiological factor in ocular affections is beyond question.

Though clinical symptoms and x-ray findings may give no evidence of accessory nasal sinus involvement the presence of such involvement should be suspected when no other cause for the ocular affection can be assigned. It is possible that a degree of pathology so slight as to escape detection by the methods at present available may still be sufficient to affect the delicate fibers of the optic nerve in the narrow confines of the optic canal.

There are circumstances under which the seriousness of an ocular affection may warrant the opening of sinuses which give no evidence of disease.

The proper management of ocular disease demands the closest co-operation of the rhinologist, the ophthalmologist and the neurologist in order that the patient may receive the adequate treatment to which he is entitled.

Surgery should be judicious and as conservative as is consistent with the end to be attained.

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#### DISCUSSION

A. B. KNAPP (Vincennes): In spite of the so-called manifold and intimate anatomic relations between the orbit and accessory sinuses, the number of complicating orbital affections is relatively small, according to Hajek. They usually appear associated with an acute inflammation or an acute exacerbation of a chronic accessory sinus inflammation and they are chiefly associated with a pronounced infectious disease, such as influenza, scarlet fever, measles, etc.

The inflammatory changes in the orbit, which appear in this way, show various degrees of intensity. We may note the appearance of periostitis, orbital abscess and orbital phlegmon. The latter is the most severe and the most dangerous complication. Probably the most commonly noticed ocular affection resulting from intranasal disease is obstruction of the lachrymal duct. The oedema is generally most marked on the nasal side of the upper lid, and is characterized by a total absence of the ordinary signs present in inflammatory diseases of the eyelids with the exception of the swelling. The oedematous condition frequently shows a tendency to come and go, disappearing whenever the sinuses evacuate their fluid and reappearing as the secretion re-accumulates within them.

The extra ocular muscles may be affected in disease of the sinuses because of their close proximity to the orbital walls and also because the nerves supplying them pass close to the outer wall of the sphenoid sinus.

The orbit may be involved as the result of suppuration in the neighboring sinuses. As a general thing, the source of the trouble is readily recognized in these cases, the symptoms directing attention at once to the sinuses. Orbital suppuration is generally the result of disease of the frontal, the ethmoidal, or sphenoidal sinuses. It is apt to be extensive and its results most grave, not only as regards the vision, but in respect to life.

If its origin is promptly detected and proper treatment given the sinus condition, the results are most gratifying. In my own practice in the past year I have seen only two cases of orbital involvement. One from a chronic frontal sinus suppuration and the other from an acute ethmoid suppuration. Both of these responded promptly to operative interference.

ALBERT E. BULSON, JR., (Fort Wayne): I have had a varied experience, like the rest of you, with sinus complications in connection with

the eye in my relationship with the roentgenologist. I think some of you may have heard me say in years gone by that I do not care two raps for the average x-ray picture as taken by the average roentgenologist. I have not changed my opinion on that. I think the greatest thing we have to contend with today is the poor roentgenologist. I say that advisedly, and I say it from a feeling of necessity, and the reason is because I am called upon to look at so many plates made by so-called roentgenologists from a small city, and while I do not pretend to interpret plates always accurately, yet I have found from clinical experience that the interpretation placed on them by the roentgenologist does not amount to anything. I have taken these plates to my own roentgenologist, a man in whom I have the greatest faith, a man who is well trained in doing sinus work, and who will say, "I cannot make anything out of these plates and I do not see how any man can." I think the thing we should do is to get in closer touch with first-class roentgenologists, say with a firm like Cole and Beeler in Indianapolis, men who really deserve the confidence of the men in Indiana, because they do such high-class, accurate work. We have a man in Fort Wayne who is beginning to do excellent work in that line and on more than one occasion he has said, "Dr. Bulson, one thing I like about you is that you give me the clinical history." He has hundreds of plates that we have looked at together and I know his judgment is better than mine. When it comes to the clinical manifestations I think my judgment is better than his. But in spite of all this they make mistakes. For instance, two nights ago I operated on a case on his recommendation, a woman who has had distressing frontal and occipital headaches with some rheumatism, and for whom I had enucleated a very bad pair of tonsils, and who was referred to an excellent internist who said there was nothing wrong, from a general examination. From the clinical manifestations I could not elicit any particular symptoms of disease in any of the accessory sinuses. Her nose was comparatively free. I sent her for x-ray examination and the roentgenologist said that the left frontal sinus was practically obliterated from an old inflammation, but that the right was clear; that both of the maxillary antra were small, but he thought they were clear. He thought a radical operation was indicated, so she was taken to the hospital and I did a radical. I opened into the frontal sinus and much to my surprise I found both of these sinuses contained fluid pus in a small quantity. I then opened the right sinus and found it full of pus; I opened the left one and found it all right. That was a case where the roentgenologist evidently fell down, but why I do not know. I am not criticising him, but the point I want to make is that I think the clinician and the roentgenologist should compare notes—there should be more team work. I once heard a surgeon say, "I do not want the roentgenologist

to ask me any questions. I have him to tell me what he finds on his x-ray plates, and I can tell whether it is worth anything." I do not believe that. The roentgenologist is able to interpret what he sees in the plate much better if you give him a clear, concise and comprehensive clinical history. In other words, meet him half way. In the end you will find you obtain results that count.

In opening the sphenoids I think we ought to remember what Schafer said at the A. M. A. in Boston, that whenever you open a sphenoid cell, the anterior wall, do not use curettage, because the optic nerve does pass through the sphenoidal cavity frequently and there is a dehiscence and you may curet the optic nerve. It is sufficient to open it and break down the anterior wall.

I heartily commend what has been said regarding ventilation. I am sure I have operated on twenty-five cases in the last few weeks in which I did not get any pus, and every one of them have been cases that were ventilated. In practically every one my roentgenologist has made the same statement that Dr. Beeler made—that there is a hyperplastic condition there. If you do a window under the inferior turbinate, in my judgment it is the ventilation that does the work. If they tell you there are polyps there I use alcohol. I think it is the best thing for polypoid tissue that there is. I also use mercurochrome in suppurative cases.

JOSEPH D. HEITGER (Louisville): From all that has been reported in regard to eye lesions in the past, it appears that the majority of these cases do not come from the suppurative type of disease, but from the hyperplastic. We have two distinct clinical methods of making examinations for these two distinct types of disease. If you follow the technique of Hajek, one can clinically determine the presence or absence of suppurative disease in every case, except close empyema; if you follow Hajek's technique, and find pus there, follow it to its source. You must occasionally eliminate double antra. For the hyperplastic type I follow the technique of Sluder, and that means the use of an arc lamp. You have cases referred to you by some internist or oculist who thinks he cannot make a diagnosis—perhaps the patient has come in from the country and wants to get back on a certain train and he wants to give you about fifteen minutes to make the examination. Do not attempt it. You cannot do yourself or your patient justice. A diagnosis of sinus disease made at one sitting should be taken with a grain of salt.

In regard to what has been said about antrum puncture: For a long time we have been led to believe that if we did not get anything on puncturing the antrum, that the antrum was negative. The recent work of O'Hirsch of Vienna, has shown repeatedly that, particularly in cases of recurrent polypi, cases that have been operated



and re-operated, the antrum is negative to puncture, but yet he has frequently found the primary source of infection in the antrum. In these cases the very first thing we should do is to determine the condition of the antrum and possibly to explore it for examination, either directly, or through a window, or with the antrascopes.

A number of years ago at the Academy meeting, Van der Hoeve made a very significant statement—that the rhinologist could get along in his practice without knowing much about the eye; but the ophthalmologist must know something about the sinuses. Another statement was that no one could say absolutely that the sinuses are negative unless the mucous membrane is histologically examined. I want to stress the point in these obscure cases of repeated examinations—repeated examinations following the general rules of technique designated by Hajek and Sluder.

I want to emphasize the point that the specificity of locality is often more important than the specificity of the pathology. That is why the x-ray man is often not able to give us what we want. I think we expect too much from the roentgenologist sometimes. You must remember that a roentgenogram is absolutely nothing more or less than a record of densities, and it is the interpretation of those densities which the roentgenologist must give us. If we keep that in mind I think we will be a little more charitable to the roentgenologist. Another peculiar thing about the pathology of these hyperplastic cases is that there is a breaking down and a building up. You may recall a picture I showed last year showing some detailed work on osteoblasts, showing that there is a breaking down and a building up, and if these two are equal you will get an apparently normal record of density. But that is not the fault of the roentgenologist, that is the fault of the pathology. These hyperplastic cases are the type where that resorption is going on and at the same time there is a deposit of calcium which neutralizes the resorption process.

In the case of sudden loss of vision before any operative work is considered there are two or three things we should remember. One is the possibility of beginning malignancy of multiple sclerosis, or lues. There are without doubt more cases of multiple sclerosis on the continent than here, or perhaps they know more about finding it than we do. I do not think any case of sudden loss of vision should be treated by operative procedure on the sphenoids or ethmoids until after these things have been eliminated.

B. J. LARKIN (closing): I thank the members of the section for their discussion. I appreciate it very much.

One reason, perhaps, that the ophthalmologist does not go into detail is that he realizes, after making the diagnosis, that this is a case for the rhinologist. It is gratifying to hear other members of the section say what I have maintained for years—that the eye, ear, nose and throat are

so associated that a man should be competent in each of them. Every day we encounter patients that are referred for observation and treatment to the rhinologist, and the result is that they are soon assimilated in their large practices, and we are unable to follow up the patient as we would like.

### MEDIASTINAL LUES\*

FRANK E. SAYERS, M.D.

TERRE HAUTE

My purpose is a discussion of pathological conditions as found within the mediastinum and the determination as to the part the spirochete pallidum is taking as the etiological factor.

Mediastinitis as herein considered, deals with inflammation of the connective, adipose, and glandular tissue which surrounds the mediastinal organs. It may be either acute or chronic. The acute type usually being secondary to traumatic injuries of the chest or back, such as crushing blows or puncture wounds, extension of acute inflammatory processes of the lungs, pleurae, pericardium or peritoneum, acute osteomyelitis of the chest walls or vertebrae, tracheal, bronchial and oesophageal ulcerations or abscesses which open into the mediastinum, and of metastases such as may occur in pyaemia, septicemia, erysipelas, typhoid fever, smallpox, etc.

The symptoms of this type of mediastinitis are difficult to recognize, especially if of a mild type, unless due to injury. If the inflammatory process is severe and widespread in the areolar tissue of the cavity, local symptoms may be identified. First comes a feeling of oppression in the chest, then throbbing and sometimes burning substernal pain, aggravated by breathing and motion, which extends through to the back and may radiate along the intercostal nerves, or, simulating angina pectoris pain toward the shoulder. Dyspnoea, cough, and also dysphagia due to pressure of the inflamed tissues may rarely supervene, as may cyanosis of the lips because of pressure upon the venous trunks. These symptoms are added to those of the causative malady, the febrile process of which is aggravated and in cases of moderate severity usually decline with improvement of the causative disorder or proceed to abscess formation which may be recognized as such.

An acute mediastinitis due to an uncomplicated luetic infection could give but the mildest of the above symptoms. The complete ruling out of other causative factors, the absolute proof of the existence of the infection by serological reactions and definite response to antiluetic therapeutics would be very presumptuous evidence of the condition as such. But the proven incidence is so small, or indeed completely lacking, that lues as a cause of an acute mediastinitis is to be disregarded.

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Syphilis as a cause of chronic mediastinitis becomes immediately interesting in that it responds to therapeusis, while chronic mediastinitis due to other causes is exceedingly resistant to therapeutic attacks, making the recognition of a chronic luetic mediastinitis a definite step in the direction of alleviating the symptoms presented by the patient.

Chronic mediastinitis may occur as a sequel of the acute form, but the most frequent cause of this condition is tuberculosis of the mediastinal lymph nodes, occurring as a complication of pulmonary or osseous tuberculosis, (especially in Pott's disease). According to Sajous, "Syphilis is, next to tuberculosis, the most frequent cause of this condition, and in adults probably the most usual etiological factor, when aneurism, which often involves the mediastinum, is taken into account." These conditions lead to the formation of granulations, fibrous adhesions, etc., and the resulting compression upon, constriction or distortion of the various structures the mediastinal space contains, particularly the thoracic duct, the mediastinal veins and rarely the oesophagus and trachea. This same formation of fibrous tissue within the mediastinum not uncommonly follows lobar pneumonia, rheumatic fever and other acute infections and gives rise to the symptoms varying with the parts constricted or compressed.

The signs and symptoms elicited by this formation of fibrous tissue vary. Subjective symptoms are often slight and vague. A sensation of pressure behind the sternum with slight pain, which the patient may describe as a burning or distressing symptom, such as dyspnoea, marked cyanosis, venous engorgement and distention, severe dysphagia or laryngeal symptoms such as hoarseness, laryngeal paralysis, unequal pupils suggesting pressure upon the recurrent laryngeal or sympathetic nerves. These latter probably are found more frequently in the syphilitic type than in the others.

As the symptoms of this diffuse mediastinal sclerosis are dependent upon the constriction of, or pressure upon the various structures contained within the mediastinum, it is essential that all conditions which may be the cause of pressure within the mediastinum shall be considered. The following conditions when present within the mediastinum may cause pressure symptoms; benign and malignant neoplasms, abnormally placed organs such as sub-sternal goiter and thymus, Hodgkin's disease, lympho sarcoma, tuberculous glands, pathology in the circulatory system, comprising aortitis, dilatation of the aorta, cardiac hypertrophy, dilatation and aneurism, pericarditis with effusion, aneurism of the aorta and gumma.

Pressure upon the oesophagus causes dysphagia which is persistent when due to direct pressure. Irritation of the recurrent laryngeal nerve will also cause this symptom. Pressure upon the trachea produces a brazen (Gander) cough, dyspnoea, present often only upon exertion, stridor with bel-lows breathing and indrawn manubrium sterni,

bronchorrhoea, hemoptysis. Pressure at the root of the lungs gives difficult and insufficient aeration like phthisis, pulmonary collapse, consolidation or chronic pneumonia, the symptoms varying from time to time with the variation in pressure. Pressure on nerve trunks cause a neuralgic type of pain which is usually paroxysmal and intermittent. Pressure on the pulmonary artery will give a systolic murmur over its course and a dilated right heart. Pressure exerted on the superior vena cava causes cyanosis, oedema of the head and upper extremities, the collaterals do not pulsate as in cardiac disease, while pressure on the right pulmonary veins cause hydro-thorax and collapse of the lung. Pressure upon the thoracic duct causes marasmus due to the withholding of the intestinal nutrition from the blood stream and consequently the entire body. Pressure upon the cardiac plexus causes anginal attacks simulating angina pectoris distributed from the third cervical to the third dorsal segments. Pressure upon the sympathetic nerves is recognized by the effect upon the musculature of the pupils supplied by the sympathetics. If only sufficient to cause irritation there is a dilatation of the pupils, or if of sufficient intensity to paralyze the nerves, the pupils are contracted. Unless due to lues there is no loss of reflexes. Unilateral sweating, blushing or pallor points to pressure upon only one of the sympathetic trunks. Pressure upon the vagi produce dyspepsia, nausea, vomiting, dyspnoea, hiccough. Upon the recurrent laryngeal nerves hoarseness, aphonia, spasm or paralysis of the vocal cord or in extreme cases suffocation, while upon the phrenic nerves one finds unilateral paralysis of the diaphragm with pain about the neck just above the clavicle.

When any of the above, or combination of them occur, the foundation for the diagnosis is laid, and the cause of the pressure is the problem to be solved.

Gummata of the lymph nodes of the mediastinum are rather unique in the field of mediastinal tumors in that few symptoms other than those of pressure are presented, and they are relatively slight when compared with other tumors of approximate size. When gummata are present the serological reaction for lues usually show the condition to be present and the therapeutic test will show a marked and definite response with alleviation of symptoms, diminution in the size of the tumor and general improvement in health. The presence or absence of collateral evidence of lues must be thoroughly considered in cases presenting negative serology yet showing gratifying improvement while on syphilitic treatment as a general tonic effect of anti-luetic treatment upon other conditions has been frequently noted.

In the perfection of the x-ray and the astuteness of the roentgenologists of the present day we have a wonderful aid in our differential diagnosis of these mediastinal conditions. Another source of



great assistance is the pathologist. Accurate diagnosis of certain conditions cannot be made without his assistance.

In gumma of the mediastinum, the pathologist cannot help us in an ante-mortem diagnosis. Roentgenological findings are not absolutely characteristic. Usually they show a well circumscribed tumor, sharp in outline, frequently extending into the lung tissue, generally unilateral.

In malignant tumors of the mediastinum, tumors due to Hodgkin's disease, lympho-sarcoma, and usually in tuberculosis of the mediastinal glands, by the time a tumor of sufficient size to cause symptoms has formed in this area there are enlarged glands presenting in an accessible region which may be removed and a pathological diagnosis made.

The x-ray picture of Hodgkin's disease is so typical that it should not be confused with any luetic condition within the mediastinum. The growth extends from the hilus of the lung, is bilateral, diffuse and characteristically feathery in outline.

Lympho sarcoma presents more of a problem from the roentgenologist's standpoint, for it is usually distinctly circumscribed and usually unilateral. However, metastases are often present and the pathologist able to solve the problem.

In tuberculosis of the mediastinal lymph glands the clinical findings are an aid in determining the diagnosis. The temperature, the findings of a tuberculous condition elsewhere, as in the lungs, tubercle bacilli in the sputum, a violent tuberculin reaction are strong evidence that the condition is not luetic.

Rapid growth, an effusion of blood or bloody serum into the pleurae, with pressure signs, the x-ray usually revealing a single sharply circumscribed tumor with the appearance of glands of stony hardness in the axillae, cervical or supra clavicular region are signs of malignancy and should not be confused with any tumor of luetic origin.

Symptoms of pressure caused by a large sub-sternal goiter or a persistent thymus are usually easily recognized as to their etiology by a roentgenologist. The same holds true for the benign neoplasms such as chondromata and dermoid cyst.

The well recognized affinity of syphilis for the entire circulatory system makes the recognition and differential diagnosis of this disease in the heart and blood vessels of the mediastinum one of exceedingly great importance.

Cabot analyzed 600 cases of cardiac disease and reported twelve percent as due to syphilis, comprising aortic insufficiency, aortic aneurism and myocarditis.

Formerly the only lesion of the heart attributed to lues was the gumma, although it was recognized that syphilitics were frequent sufferers of degenerative changes in the heart muscle. It is now known that the spirochete shows an especial predilection for the heart and aorta. It is now a

matter of laboratory routine to demonstrate active syphilitic lesions in the heart muscle of known syphilitics.

The coronary arteries appear to suffer the more severe depredations by the infection than the other portions of the arterial system, thus undermining the food supply of the heart. This invasion has been noted frequently as early as in the secondary stage of the infection, and if not treated, or improperly or insufficiently treated, may eventually result in gumma or fibrosis of the heart. The late cardiac changes due to syphilis are fatty degeneration, fibrosis and gumma, which may effect the auriculo-ventricular bundle, which in turn affects the heart rhythm.

Symptoms of late syphilitic disease of the circulatory system are difficult of differentiation from degenerative changes of other etiology. It is in the early stage of the infection that symptoms of disease in the circulatory system become more presumptive and should be given the fullest consideration. In the earliest days of the infection severe cardiac weakness may develop and the recognition of the trouble and its etiology means much in the future being of the individual. Dyspnoea seems to be the most common symptom in the early stages, precordial pain and tenderness and anginal pains are usually present. Alteration in the rate of rhythm are present in many of the cases, due to the involvement of the auriculo-ventricular bundle. In these cases vigorous anti-leptic treatment will clear up the symptoms quickly, and in this lies the differential diagnostic point.

The late cardiac manifestations present more of a diagnostic problem. Lues should be strongly suspected in apparently healthy individuals who, as a result of overwork, or some sudden exertion, suddenly develop severe cardiac symptoms, such as tachycardia or myocardial insufficiency and particularly presumptive when the cardiac symptoms respond especially poorly to the usual cardiac tonics. The principal points in the differential diagnosis lie in the sudden onset in an apparently healthy individual and the poor response to the ordinary heart tonics.

The susceptibility of the first part of the aorta to syphilitic infection has been long known. In the majority of cases of syphilitic aortitis both the symptoms and the physical signs are those of aortic insufficiency. It is encountered most frequently in early middle life. If rheumatism and extraordinary muscular stress can be eliminated by the history, the potential diagnosis of an luetic etiological factor becomes logical. However it must be borne in mind that syphilis at times may masquerade as rheumatism, which necessitates a most carefully inquiry into the symptoms at the time of the supposed rheumatic infection.

In a smaller percentage of cases syphilitic aortitis occurs in an acute form with sub-sternal pain, a sense of constriction in the chest, dyspnoea and at times angina-like attacks of pain. In cases

of continued sub-sternal pain the patient should be proven to be free of lues by every test including intense therapeutics.

The importance of syphilis as an etiological factor in aortic insufficiency as seen among those in young adult life is becoming more and more apparent, while among those of early life, rheumatic endocarditis is usually the cause. Therefore the presence of a diastolic murmur in the aortic area associated with the arterio venous signs of an aortic insufficiency which becomes apparent during the middle age of the individual or later, is indeed presumptuous of endocarditis of luetic origin in the aortic area of the heart, and with co-operative serology the percentage may be placed close to the hundred mark.

The diagnosis should not be made on the diastolic murmur alone, for such a murmur in this portion of the chest may be caused by an insufficiency of the pulmonary valves. The time and location are all that this murmur has in common with aortic regurgitation. It is usually associated with chronic mitral disease.

It is not easy to distinguish between aortic regurgitation due to disease of the semi-lunar valves and relative insufficiency associated with dilatation of the aorta, but the etiology of the two conditions is relatively parallel.

Whether the aortic insufficiency of the acute type of aortitis is due to syphilis will rest with the serological reaction. In cases which the aortic lesion occurs in combination with damage to the mitral and tri-cuspid valves, a rheumatic origin of the trouble is quite probable, but in isolated aortic lesions it is becoming more and more apparent that syphilis is the chief offender.

While any of the acute infectious diseases may cause arterial degeneration, such an occurrence is not common except in syphilis. As a predisposing factor in the cause of aneurism syphilis easily holds first place. Next to syphilis as a causative factor comes intense internal strain caused by excessive physical exercise or labor such as is met with by stevedores, draymen, etc., or sudden exertion or straining at stool. If there be a patch of mesaortitis, a sudden dilatation may result. This mesaortitis is usually due to lues but may be the result of such things as alcohol, lead, tobacco, gout or chronic nephritis. Passive dilatation of the aorta may be produced by persistent arterial hypertension such as occurs in chronic nephritis. The helpful diagnostic points here are the history of the use of one of the toxic agents, the history of an attack of gout, or the clinical findings of the kidney lesion.

Lues more frequently attacks the ascending portion of the aorta, making an aneurism of this portion of the vessel more presumptive of such a diagnosis than an aneurism of the remaining portions.

A generalized dilatation is more presumptive of a steady pressure as found in hypertension than of a general mesaortitis due to the spirochete.

The mucous membrane of the trachea may be the seat of catarrhal change during the secondary stage of syphilis, due usually to the presence of mucous patches. The symptoms presented in this stage are usually those of a simple trachetitis. There is cough, expectoration and some sub-sternal soreness. In the later stages of the disease the membrane lining the trachea becomes ulcerated, there is cough, at first non-productive, later productive of a muco-purulent sputum. Later as the ulceration deepens the sputum becomes blood streaked and a frank hemoptysis is not unusual.

This condition must be differentiated from pulmonary tuberculosis, but the persistent absence of tubercle bacilli in the sputum and lack of lung findings by physical and x-ray examination make such a diagnosis rather improbable.

Following an ulcer of the trachea, stenosis occurs. The completeness of the stricture produced and its location determine the quality of the symptoms. The same holds good for gumma of the trachea. As soon as the stenosis is sufficiently complete, the patient begins to suffer from dyspnoea, the amount depending upon the degree of stenosis present. It may be persistent or paroxysmal, it is both inspiratory and expiratory. There is usually a marked stridor. The patient may become cyanosed and the pulse weak. The respiratory movements of the chest are diminished and the breath sounds feeble. The tissues at the base of the neck, the lower intercostal spaces and epigastrium show inspiratory retraction. There may be a whistling quality of the respiratory sounds over the site of the stricture.

These symptoms may also be produced by tumors external to the trachea, but in the bronchoscope and x-ray we find the needed aids for our differentiation.

This discourse might be greatly prolonged with much still to be said. The ravages of syphilis undoubtedly are so far reaching in the mediastinum in common with other portions of the body, that it is doubtful if medical knowledge will ever attain complete understanding of the power of the spirochete as a producer of disease.

The diagnosis of lues as a causative agent comes as the result of the correlation of the findings of all branches of medical science and it must be borne in mind that while the serological reaction is our greatest aid, it may be but a source of confusion.

If after a review of all collected data our diagnosis is still undetermined we may resort to the so-called therapeutic test in our effort to arrive at a definite conclusion, immediately to be confronted with the question of what constitutes a positive or negative therapeutic test. The borderline is always with us.

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### RADIUM THERAPY\*

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MUNCIE

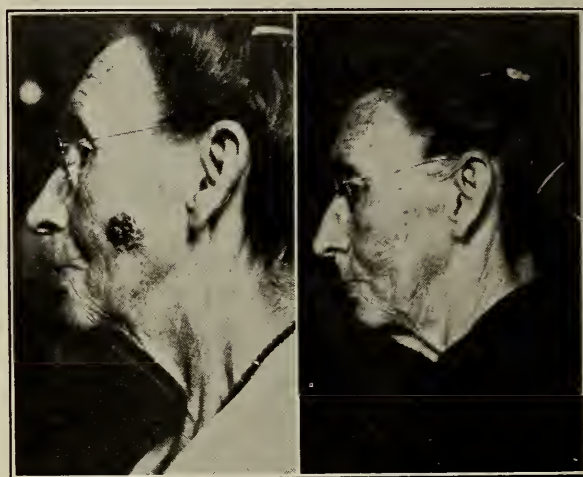
Radium has long passed the trial stage as a curative agent and now stands accepted by the medical profession as an indispensable agent in combating disease. As radium is scarce and expensive and the technic of its use is unique, its actual possession and employment are limited to a comparatively few men. But the great majority who do not own radium ought to be thoroughly familiar with its general characteristics, its chief indications, the principal points of its application, and the approximate prognosis of diseases treated with it. Without such elementary knowledge physicians may sometimes fail to give their patients the best advice. It is my purpose to present briefly some important points on the subject in the hope that the busy clinician may gain a clearer conception of it.

**Biologic Effect**—The tissue changes caused by radium have been extensively studied in their gross phases and also microscopically. We know fairly well the sequence of cellular transformations in all degrees of radiation, but there is no general agreement yet regarding their explanation. They are on the whole precisely similar to the reactions caused by x-rays. A discussion of this aspect of radium therapy is beyond the bounds of this paper. It might simply be remembered that radium in mild doses causes serous exudate, lymphocytic infiltration and connective tissue proliferation; after heavy doses these changes are succeeded by obliterative endarteritis and necrosis. Radiation affects embryonic and undifferentiated far more than differentiated and adult tissue; for instance, lymphocytes, spermatozoa and germ cells of the ovary are very sensitive, while muscles, bones and nerves are comparatively resistant.

The radiation from radium comprises three kinds of rays, the alpha, the beta, and the gamma rays. The alpha rays, while very intense, have no penetration, being completely absorbed by anything as thin as a layer of tissue paper. In therapy we utilize only the beta and gamma rays. Beta rays are particles of matter with a negative

electrical charge, and are known as electrons; they have a certain penetrating power, the limit of which is about one and one-half millimeters of brass. The gamma rays are not particles of matter, but are electro-magnetic waves, being of the same order of phenomena as radio waves, light waves, ultra-violet rays and x-rays; these various waves and rays differ only in their length. Both x-rays and the gamma rays of radium when they encounter living tissue, generate electrons and there is good reason for believing that the biological effect of radiation is due to this phenomenon. Gamma rays have a high penetrating power, their limit being about fourteen cm. of brass; they are, therefore, more than ninety times as penetrating as beta rays.

The beta and gamma rays are available either in solid radium preparations or in the gaseous preparation known as emanation or radon. The therapeutic effect of both is the same, but the solid radium has long life, being half exhausted in 1,730 years, while emanation is half exhausted in ninety-two hours. Solid radium preparations are supplied in the form of a powdered salt, such as sulphate, carbonate or bromide, in a delicate sealed



Before

After

1. Basal cell epithelioma of cheek, cured by radium.

glass tube, encased in a metal capsule or needle of standard thickness, usually 0.4 mm.

**Indications**—The indications for the use of radium might broadly be stated to be the same as for roentgen rays. However, the actual indications are limited by the fact that few physicians have radium enough for large or multiple lesions; for instance a mammary cancer where radiation is required on the breast, the axilla, and the cervical region could be treated with radium only if large quantities were available or at the expense of protracted piece-meal sessions. On the other hand, radium can be used in many locations where roentgen rays are impracticable, as in the uterus, the rectum, the bladder, the facial sinuses, etc. The choice of radium in preference to roentgen rays, therefore, is dictated by certain technical considerations, plus the fact that radium gives a

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better cosmetic effect in surface lesions. These reasons account for the widespread use of radium in the following conditions: Cancer of the cervix, vagina, bladder, rectum, prostate, esophagus, larynx, lip, tongue, oral cavity, accessory sinuses; all kinds of lesions affecting the skin, especially cancer, nevus, keloid, moles, warts and keratosis, and a number of miscellaneous conditions, such as leukoplakia, metrorrhagia from fibroids, leukorrhea, endocervicitis, urethral caruncle, condyloma, etc. Of course radium has been used and is still used for many other conditions, but the



Before

After

II. Basal cell epithelioma of temple, cured by radium.

above list represents perhaps the general choice of those therapists who have both radium and roentgen equipment.

*Cancer of the Cervix*—Perhaps the most brilliant achievements in the use of radium have been recorded in the treatment of cancer of the cervix uteri. At nearly all the principal clinics of America and Europe the surgeons now decline to operate cases of cervical carcinoma if any extension to the parametrium is detected and in several clinics the so-called operable cases, where the neoplasm appears strictly localized, are also treated by radium. The American College of Surgeons authorized a survey of the subject several years ago and the chairman of the appointed committee, Dr. R. B. Greenough, of Boston, reported that a patient with operable cancer of the cervix has one-to-four chance of cure by operation, and one-to-three chance of cure by radium; further, that the operated patient risks a one-to-five chance of death from operation. This report was based on exhaustive study of statistics gathered from many sources.

In over eighty percent of these cases the local growth can be controlled by radium, eliminating the foul odor, the necrotic discharge and the hemorrhage. If the cancer has invaded the parametrium it can seldom be prevented from further involvement of the pelvic structures, but its progress can usually be much retarded and often the pains in the back and legs, characterizing the late

stages, can be alleviated by deep roentgen radiation.

The results of radium therapy on the large fungating growths of the portio vaginalis are very striking. Within a few days the hemorrhage ceases, in a few weeks the papillomatous mass has gone and usually in two months the cervix is smooth, pale, healthy and smaller than normal. The more dangerous cases, however, are those flat cancers of the cervical canal, usually squamous, and the deep-lying cancers which often involve the lateral structures before they reach the mucous surface. These are insidious, treacherous, stubborn and not at all spectacular. Therefore the clinician should be constantly alert to detect these cases early. A little bloody discharge, either constant or occasional, in a woman of the cancer age, must be investigated until a definite and sure diagnosis is made.

The radiologist is best fitted if he has surgical experience and is capable of taking a suspected case and establishing the diagnosis. He should sound and curet the uterus, if necessary, do a biopsy, if indicated, and above all should know when to abstain from doing either or all. He should have the knowledge and equipment to use the actual cautery or high frequency as an adjunct to the application of radium. And if he cannot do a hysterectomy, he should be quick to turn over to the surgeon any case that he finds to be a cancer of the fundus, for these are distinctly operative.

*Metrorrhagia*—When uterine hemorrhage is not due to cancer, it may be due to fibroids. If the fibroid is larger than a six months' pregnancy, or is pedunculated, or submucosal, or is gangrenous, or if coincident pregnancy or pelvic inflammation exists, or if the patient is young—in



Before

After

III. Basal cell epithelioma of nose and cheek, cured by radium.

any of these conditions radium should not be employed. Otherwise it can be used with eighty to ninety percent certainty of checking the bleeding within a few days. If the tumor does not regress in size, roentgen therapy should supplement



radium. It should be remembered that the subsidence of a fibroid following radiation is very slow and a year may pass before the tumor is reduced to one-third its original size. It seldom disappears entirely.

Metrorrhagia from other causes is usually amenable to radium therapy, but large or repeated doses should not be given the young woman of child-bearing age, unless the necessity is urgent.

Leukorrhea and endocervicitis usually respond to radium and if other means of treatment fail they should certainly have the benefit of radium. Heavy dosage is not required, but sometimes a dose must be repeated and the desired result is usually several months in being attained.

*Cancer of Lip*—Although cancer of the lip is a conspicuous lesion and the patient aware of it from its earliest beginnings yet it is notoriously neglected. I believe lip cancer would practically disappear if every lesion lasting more than a fortnight were referred to a competent physician. Cancer of the lip is now managed at many of the large clinics just like cancer of the cervix, that

these cases is excellent, the scar sometimes being invisible, which is in great contrast to the disfigurement usually resulting from excision.

*Cancer of the Oral Cavity*—Malignant neoplasms of the tongue, tonsils and buccal aspect of the cheeks have always been rather desperate conditions more or less dreaded by surgeons. The use of radium has not proved to show any greater number of cures than surgery but the operative mortality and mutilations are avoided and therefore the average duration of life is longer and the patients have a greater degree of comfort.

Carcinoma in the floor of the mouth is the most intractable of intra-oral neoplasms, while carcinoma of cheek, jaw and tonsil may also be very hard to deal with. Cancer of the tongue is perhaps the easiest of all to handle. Cases with metastasis to lymph glands are usually regarded as inoperable, at least the primary lesion should not be excised; sometimes, however, it is good practice in these cases to radiate the glands first so as to close off the lymphatics and then excise the entire chain of affected glands followed by further radiation. Of course, in the meantime, the original growth should receive vigorous radium treatment.

Prognosis in these cases should be based upon the location, character and extent of the growth and in any event should be guarded. The average duration of life is two years, the worst cases succumbing in a few months and the favorable ones living five or more years without recurrence if efficiently treated.

Leukoplakia is a stubborn disease affecting the tongue and oral mucous membrane and seldom responds permanently to medication. Radium, however, cures it in perhaps half the cases. Of course, syphilis should be ruled out before any treatment is undertaken other than anti-specifics. If radium is unsuccessful then electro-desiccation can usually be depended upon for a cure. Leukoplakia is serious, chiefly because of its tendency to develop cancer.

*Skin Lesions*—By far the most frequent application of radium is to skin lesions, and of all locations the face is the commonest. Epithelioma, both basal cell and squamous, occurs more often on the face than on all other surfaces of the body combined. The basal type, or rodent ulcer, seldom metastasizes and yields promptly to radium with a resulting soft, flat, pliable scar. Fortunately, this type is far commoner than the squamous variety which is not so easily curable, showing a tendency to recur and metastasizing readily. Epithelioma situated where there is a loose layer of subcutaneous tissue can be treated by heavy doses of radium almost with impunity, but where the skin lies next to bone or cartilage, as on the nose and ears, some precautions must be observed and treatments may need to be repeated rather than cause the necrosis of cartilage of bone by single heavy dosage. Such necrosis is painful and slow in healing. Destructive lesions in the



Before

After

IV. Basal cell epithelioma of cheek, near the eye, cured by radium.

is, they are inclining more and more to radium as the treatment of choice. The prognosis varies with the type of growth and its stage of advancement. Lesions on the lower lip are usually squamous celled; clinically, they are of two chief types, one being a shallow ulcer, constantly crusting, with little infiltration, and late in metastasizing; the other being raised, indurated with a small central ulcer, deep infiltration and early metastasis. Statistics show as many cures by radium in early lesions as by operation, while inoperable cases are almost all treated by radium and the local lesion successfully destroyed.

The metastases, however, while often controlled for a while by radium and roentgen ray usually sooner or later cause death. In some clinics the infected glands are removed surgically either with or without preliminary radiation, but always followed by radiation. It should be borne in mind that the cosmetic result from radium treatment in



close vicinity of cartilage or involving it are sometimes avoided by the radiologist and referred for excision. Cancer around the eye is ideally treated by radium because of the cosmetic result; the eye itself is highly resistant to radiation. Epithelioma of the dorsum of the hand is not so well adapted for radium because the necessary dosage sometimes causes tendon damage which is painful and slow to heal. These cases are also treacherous because of their tendency to early metastasis.

There are numerous innocent skin lesions that are prone to become cancerous and are therefore potentially dangerous after forty years of age. These include keratoses, moles, seborrheic warts, papillomas and rough scaly patches. I am convinced that it is sound practice to recommend destruction of all such lesions either by surgery or radiation.

Nevus is another lesion peculiarly adapted to radium therapy, excepting that type known as the port wine mark. In general the flat type of nevus is harder to cure than the raised-type. The more recent the nevus, the better result after radium therapy and therefore congenital cases should be referred in the first few years of life. Nevus should have very cautious treatment with radium, especially in the case of girls, where cosmetic result is more important. Therefore it is common practice to give very light doses at monthly intervals, sometimes requiring a year or more to effect a cure.

The application of radium to keloids, moles, warts and keratoses is very successful and these lesions are often resistant to other forms of treatment. They are often ignored by patients and sometimes by physicians, but dermatological records show that moles and keratoses are frequent forerunners of malignancy and should be treated.

**Radium Reaction**—Every physician should have a general knowledge of the nature of reactions after radium treatment so that he can answer the questions that patients ask. After a heavy dose of radium to the skin, such as is necessary for epithelioma, keratosis, mole, papilloma, etc., there develops in about a week a reddening of the treated area with itching and often some formication. These phenomena increase for a few days and then begin to wane, except that formication may last for many weeks. After two or three weeks the lesion will begin to break down, the ulcerated surface will crust over repeatedly, the ulcer will shrink and new skin will creep in from the edges till healing is complete. Sometimes in a deep ulcerated lesion the final crusts will be peculiarly dry, grayish, adherent and persist for a long time. In the case of small lesions it can be safely said that, if a curative dose is given in one sitting the lesion will be healed in six to eight weeks. Large lesions will take longer, depending on their size and the length of time required to treat them. The average radiologist does not have enough radium

to treat extensive lesions at one sitting and it may take several days to cover the entire area. In such cases roentgen rays are used in preference to radium in the interest of time and economy.

Certain types of lesions, especially those that are raised or indurated, may be most expeditiously treated by doing an electro-desiccation preliminary to radium.

It is quite a universal belief in the mind of the laity that a radium treatment is painful, but of course this is not true. There is no sensation whatever at the time of treatment. It is sometimes a little tedious and occasionally uncomfortable to have a metal applicator fastened to one's skin with adhesive plaster, especially on the face, but there is no burning, no warmth, no stinging, no prickling, and no "drawing." The duration of a treatment frequently surprises the patient; skin cancer may require from two to twelve hours, depending on the technic indicated and the amount of radium. Lymphatic glands or other subcutaneous structures may require eight to twenty-four hours, the longer treatments being



Before

After

V. Squamous cell epithelioma lower lip, no glandular metastasis; cured by radium. Note radium needles thrust through the base of the growth.

usually divided into suitable periods. Cancer of the uterus requires about 3,000 milligram hours, which means fifty milligrams for sixty hours or 100 milligrams for thirty hours. Sometimes it is necessary to insert radium needles into the tissues and this usually calls for a local anesthetic, or occasionally even a general anesthetic.

So-called radium sickness may follow radium treatments to deep parts, such as uterus, rectum, etc. This may consist of nausea, vomiting, malaise, prostration, headache and fever. Modern usage, however, aims to calculate dosage so as to avoid these symptoms. With the best calculations, however, it is not always possible to avoid certain disagreeable effects, such as rectal or vesical tenesmus after radium administered in the pelvis; vesico-vaginal or recto-vaginal fistulae, after radium applied to the uterus or vagina; salivary fistula after radium on a cancer of the cheek, dry



mouth and painful swelling of the parotid after radium to the neck, and several other similar sequelae. But these results should occur only in the treatment of malignancy, which must be vigorous and bold and be not too fearful of lesser evils.

The practitioner should know that a deep-seated cancer, involving any structures beneath the skin, may require long, protracted and repeated treatment. Cancer of the cervix requires that the patient enter the hospital for at least two days and a general anesthetic may be necessary, especially if the patient has not borne children; she may require another hospital session sixty days later and subsequent treatments according to circumstances; she should remain under the radiologist's care indefinitely, with observations at first every thirty days, then every sixty days for a year; in succeeding years three or four examinations a year usually suffice, unless or until recurrence is found, when new treatments become necessary. Radium treatment of serious pelvic conditions usually brings on an artificial menopause. Cancer in other deep-seated locations requires a more or less similar handling. Prognosis in all cancers that are not superficial should be guarded. The current parlance is of "cures," or "five-year cures," or "three-year cures." I believe it is more fitting to speak of the disease being "arrested" or "no recurrence" or "clinically well" for a given period.

*Biopsy*—There was a period when it was customary to excise a piece of tissue from all suspicious neoplasms for purposes of diagnosis. This custom is now dying out because biopsy so often led to disastrous results. Of course, without it we are sometimes dubious as to diagnosis, so the experienced man will reserve his biopsies for those situations where it is perfectly safe and where the knowledge to be gained is important.

*Adjuvant Treatment*—The radiologist's work is not by any means confined to the application of radium. It is quite necessary that he assume complete care of patients referred for treatment and this means attention to their comfort, their general welfare, and in particular he must use every possible means of adjuvant treatment. He must listen to tales of many irrelevant ills and be quick to see the advantage and necessity of treating a co-existing though remote ailment. For patients afflicted with deep-seated cancer a great deal can be accomplished, supplementary to radium, by the wise use of local medication, general supportive treatment, diet and drugs to promote alkalization and elimination, relief of pain, promotion of appetite, etc. A radiologist without a background of experience in clinical work is at a disadvantage and it is readily seen that a non-medical radiologist is in no sense equal to the task of using radium.

If a patient is very anemic, the radiologist must be wary of radiation and must first employ intensive methods to bring the red cells and hemoglobin up to a point of safety. If there is a

leukopenia, caution again is necessary and it is better to direct general treatment toward an increase in leucocytes before using deep radium. If the patient is cachectic he should advise against radiation, as such cases do not respond to it and may suffer severely from it.

*Recurrence and Metastasis*—The discouraging feature of radium therapy is the ever-present problem of recurrence and metastasis in malignancy. Local recurrence is frequent in certain sites of neoplasms, such as uterus, rectum, prostate, oral cavity, sinuses, lymphatic glands, etc. Usually a local recurrence can be successfully dealt with, but it commonly means that cancer cells have passed beyond the zone of origin and extension or metastasis must be constantly watched for. The radiologist must be thoroughly familiar with the modes of extension and metastasis of all types of cancer in all locations. He learns to suspect invasion of the bones in carcinoma of the breast, prostate and thyroid; to look for deposits in the lungs after malignancy of the testis, kidney and breast; to expect peritoneal metastasis in cancer of ovary and stomach and to anticipate rarely any



Before

After

VI. Advanced squamous cell epithelioma of entire lower lip, with glandular metastasis. Local lesions cured, but metastasis progressed to a fatal issue.

progress beyond the pelvis in cases of uterine or rectal neoplasms. In general the radiologist knows that distant metastasis usually exists long before it is clinically suspected. Unfortunately, extension and metastasis can seldom be treated by radium, although by x-ray a considerable degree of palliation is obtained.

I think it is not an exaggeration to say that in these days the radiologist sees more cases of malignancy than any other specialist. He may not see so much uterine cancer as the gynecologist, nor so many bladder cancers as the urologist, nor so many skin cancers as the dermatologist; but the total of all malignancies that he sees is really large and he has to deal with many cases that are referred after having passed through other methods of treatment and have become advanced and hopeless.



*Combined Radium and X-Ray*—In many cases where radium is used for the growth at the original site it is almost universal practice to use x-rays over the regional lymphatics whether or not involvement can be discovered, and when distant metastases occur x-rays are also used. This combined treatment is for the reason stated earlier, namely, that time and economy forbid the use of radium for extensive, or deep, or multiple lesions. In cancer of the cervix deep roentgen rays should be used to penetrate to all parts of the pelvis; in cancer of the lip and oral cavity, deep roentgen rays should be used for the submaxillary, submental and cervical glands as a matter of routine, as also in metastases to lungs, bones and distant lymph nodes whatever the point of origin.

In conclusion, I would say that there has been a tendency for acrid discussion, not to say dispute, between the radiologist and the surgeon, chiefly because of excess of zeal in the presentation of statistics. The radiologist has entered a field hitherto reserved for the surgeon; the intrusion has been effected only by dint of pioneering work and boundless confidence and perhaps some over-enthusiasm; it has sometimes engendered skepticism, criticism and opposition. But now, however, it should be realized that there is no ground for discord; both parties are working toward a common end, the welfare of the patient and the advancement of the profession; a broad tolerance and liberal point of view should be preserved. The radiologist should be prompt to recognize the limitations of his specialty and call the surgeon when indicated. The surgeon should be familiar with the possibilities of radiation therapy and either employ it himself or maintain intimate liaison with a competent radio-therapist.

#### SUMMARY

The clinician should know what are the indications for radium treatment and should know in a general way how to answer the usual questions put by patients who are recommended for radium. However, it is better to be silent than wrong and when in doubt, tell the patient that the radiologist will answer all his questions. Otherwise, complications like the following may occur: A physician recommended a patient for radium treatment, telling him that it would take only a few minutes' time and a cure would result in a week, whereas I had to explain that the duration of the treatment actually must be four hours and a cure couldn't ensue inside of six weeks. The patient was highly confused, didn't know whom to believe and finally went to a distant clinic. In a case of suspected cervical cancer the physician told the patient that radium could be applied in the office without any instrumentation and that her menstruation would not be affected. When I stated the real situation she was indignant and returned to her physician, who assured her that I didn't use radium in the usual way and he then sent her to a surgeon.

Radium therapy has advanced far beyond the point of being a mere technical procedure. The physician who uses radium must also use all the rest of his medical knowledge and never cease to be a pathologist, a diagnostician, and a humanitarian.

#### QUARTZ LIGHT THERAPY IN EAR, NOSE AND THROAT CONDITIONS

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Dr. Ludwig Braemer maintains that medical practice is today divided between the generalist and the peripheralist, with the latter apparently exerting the greater influence. Glenn Frank speaks the mind of the intelligent layman in this regard when he incorporates in his prayer for teachers, "Oh Lord, save us from the blight of superspecialism!" In this modern era of predominance in all fields of endeavor of the "efficiency expert," technical proficiency is the watchword and the art of medicine is apparently in danger of being eliminated by the artisan. Shortcuts in diagnoses are made via laboratory tests to the exclusion of proper physical examination and clinical study; patients are labelled "cases of so and so" instead of being understood as personalities, each with his own individual constitutional makeup and physico-chemical adjustment to disease. Many of us are accused of being more interested in the disease which exists in the patient than we are in the patient who has the disease. While it is true that most of the diseases which we now treat successfully belong to those classified bacteriogenic, ought we not to remember that the mere presence within the tissues of a microorganism ordinarily pathogenic, is not always capable of producing an infection? The successful invasion of living tissues by pathogenic microorganisms postulates a certain degree of resistance by living protoplasm which has been broken down either by increased virulence and numbers of the invaders, or by a decreased vitality of the host. Disease then is chemical maladjustment within the body, whereby the reversible processes occurring in the proteidogenous molecules forming that heterogeneous complex of elements and compounds known as protoplasm, are so modified by contact and interreaction with foreign proteins or endogenous wastes, as to endanger the normal equilibrium of forces necessary for the maintenance of life, health, growth and well being. This broader viewpoint of human economy, in which biological factors are considered of primary importance, has slowly gained recognition in the treatment of tuberculosis, in which dietetic, hygienic and environmental conditions are now of paramount importance<sup>1</sup>. Likewise, in the constitutional states of anemia, malnutrition, osteomalacia, rickets, tetany and spasmophilia—the so-called diseases of darkness, the profession no longer depends upon



specific medication or surgery, but upon proper nutrition and sunlight. The old-time general practitioner who prescribed codliver oil, and plenty of good food and recreation in the open air was much more scientific than he himself realized. Codliver oil, and other vitamin containing substances are bottled up sunlight, and we all recognize that the "sun is the best physician," if it is only possible to make a satisfactory engagement with him.

It is not then entirely without reason, that otolaryngologists who keep apace with modern medicine in other fields of work, and who have noticed for years the cyclic phases of infections concurrent with the changes of seasons, should have become interested in helio and actinotherapy. The essayist was recently honored by an invitation to discuss a paper by Dr. E. L. Lingeman on this subject before the Indiana Academy of Ophthalmology and Otolaryngology. Lingeman's conclusions, based upon his own observations and as obtained from a questionnaire of other otolaryngologists who have had experience with this work, are that ultraviolet light has real virtue and deserves recognition as a therapeutic agent in this field, but that its chief value is as an adjunct agency, and that its indications should be thoroughly understood, and the technic mastered and properly controlled. Although not a user of the air-cooled lamp, he recognizes as do most of those who answered the questionnaire, its importance in this work.

With these conclusions, the essayist<sup>2</sup> is in entire accord and particularly those in which quartz light is stated never to be the whole treatment, always to be considered as an important adjuvant, and to be best administered both locally via the water-cooled quartz mercury lamp and also generally to the entire body via a suitable air-cooled generator. The otologist who does not care to devote the necessary time and trouble to master the many details concerning the indications and technic of this work, and then apply them to his patient conscientiously, will not logically be expected to succeed in this, any greater than he would in any other line of therapy so "lightly" considered. On the other hand the general medical man, or internist, or physical therapist, who attempts to treat patients with nose and throat symptoms without making a careful examination or consultation with a competent otolaryngologist, makes an even greater mistake since he is working blindly, and will likely overlook a mechanical or pyogenic condition which if not relieved will never permit complete restoration of function or even complete symptomatic relief.

The essayist is of the opinion that much more can be accomplished by intelligent teamwork between the internist and physical therapist on the one side, and the otolaryngologist on the other, than by either working alone. The former ordinarily should not be expected to be as skilled in exact diagnosis of eye, ear and nose conditions, nor to

remedy them by surgery if it is needed. On the other hand, the busy specialist will seldom take the necessary time and trouble to administer to each patient the quantity and variety of the physical agencies necessary to successfully handle the indications. In the use of light, both water-cooled or bactericidal light, and air-cooled or biological actinotherapy should be administered to each patient. Often these are best preceded by some form of heat, either by an ordinary incandescent light, or preferably by diathermy. These treatments should, all told, never total less than an hour, and oftentimes longer. In my practice a competent otolaryngologist sees every case, or refers it to me with a correct diagnosis. Proper nasal treatment, for shrinkage of congested mucosa, and subsequent aeration for drainage purposes precedes each physio-therapeutic seance. Necessary surgery is first performed if in the judgment of the otolaryngologist this be deemed advisable. In the pyogenic affections of the nose and ear, the same principle of treatment applies as anywhere else in the body, and the first principle is, of course, drainage. The next principle is stimulation of the tissue resistance, both locally and by increasing the vis medicatrix naturæ. The end result is hyperemia, mobilization of phagocytes and bactericidal agencies, and these are all obtained by both the water-cooled quartz light and by diathermy. The chief difference is the length of time required to produce these effects. Diathermy produces them immediately to whatever extent the increased perfusion of blood through the local area will permit. In addition to a similar hyperemia which develops after several hours latent period and which remains for days, the water-cooled has a direct bactericidal power of still undetermined value. It will destroy any bacterium with which it comes into contact but its penetrating power is almost nil, not greater than the diameter of an influenza bacillus, according to the noted authority on light, Leonard Hill. Hence, from the practical standpoint, it is wise to remove all surface exudates, incrustations, fibrin, etc., and probably also of value to avail ourselves of the synergistic properties of the photosensitive dyes such as mercurochrome and gentian violet. Kober<sup>3</sup> et al, has presented evidence to show that the aminoacids of which human protein is composed contain very little tyrosin and phenylalanin, whereas bacterial protein and zein are rich in both. Now it so happens that both these aminoacids are much more capable of absorbing ultraviolet light than any of the others. On this basis he explains the selective affinity for light evidenced in pellagrins, and the postulated benign paradox of selective destructive power for bacteria. These observations are of great interest, but remain yet to be verified by other observers. We can state, however, that light as a germicidal agency, seems to be even more efficient *in vivo* than *in vitro*.

A few practical points in the technic of water-cooled lamp therapy may be of interest to those men doing this work. Since the light is very superficial in action, and since that which does penetrate beneath the epithelium is absorbed and carried away by the blood in the superficial capillaries, deeper levels in the subcutaneous tissues can be reached by pressure with the quartz lens. This dehematizes the skin and more prompt results are obtained. I have particularly found this of value in the treatment of nasal and aural furuncle, and in preauricular lymphadenopathy secondary to suppurative otitis externa. Heavy radiation must be used, sufficient to produce a regenerative erythema, or "peeling" of superficial epithelium. Most beginners in quartz light therapy err more by undertreatment than in overtreatment. It is hard to give an overdose with ultraviolet, particularly in the nose or on the skin of ordinarily exposed surfaces. A word of caution, however, as to the throat. The mucosa over the soft palate is extremely sensitive to quartz light, and should never be radiated longer than two or three minutes with the more powerful burners, unless a severe vesicular reactive lesion is desired. This relationship of sensibility to light between the nose and throat is the reverse of what is to be expected by the experience we have all had with the use of chemicals in these two cavities. We would naturally expect the nose to be much the more sensitive to light, but such is not the case. Roughly, I should say it is at least a third less sensitive than the throat. The reasons for this are hard to find, but possibly it is because the opaque nasal mucus is more tenacious and offers better protection than the transparent salivary coating of the oropharynx and soft palate. At any rate, heavy focallized radiation as from the end of a quartz rod or from the open lamp when directed to an area a centimeter or two in diameter is usually far more efficient than a widespread radiation of very short duration. It is my practice to use both in the abortion or early resolution of accessible pyogenic affections. I have never seen permanent scarring or serious constitutional symptoms from even very heavy focallized radiation. Neither have I seen scar formations follow heavy radiation over wide areas, but the absorption of destroyed skin protein is often sufficient to give a mild syndrome of allergic response or protein shock. It should not be inferred from this that light is innocuous, and that there are no contraindications<sup>4</sup>. In general irradiations, positive harm may have been done those cases which are known to be light sensitive, or to possess a physical allergy<sup>5</sup>, and in those cases in which the metabolism is already overstimulated, as in pulmonary tuberculosis with secondary infection, fever and toxemia and in certain cases of toxic goiter with high basal metabolic rate. These cases should be treated with greatest circumspection by ultraviolet light either natural or from the quartz mercury vapor lamp.

It is for this reason and for other obvious reasons that the Council on Physical Therapy<sup>6</sup> has recommended that physical therapy should be controlled by graduate physicians, who are thoroughly trained in their use and who recognize it to be one of the triad of therapeutic agencies; medicine and surgery being the other two legs on the therapeutic stool. As far as possible all treatments should be administered or directly supervised by the medical man himself, since the technic must often be varied to meet changing conditions. It is perhaps because of this fact that the Council on Physical Therapy urges all physicians to make an earnest study of the subject, and medical societies to assign a fair proportion of their scientific programs to a discussion of the underlying principles of and results obtained through the use of physical therapy. Relegation of this important field of work to laymen, even highly skilled technicians not working under direct medical supervision, is harmful and justly condemned by the American Medical Association. That this field of work has been unscrupulously exploited in the past by improperly trained individuals is recognized. The regular medical profession has justly repudiated such practices. But we should remember that all movements, physical, chemical, sociological or therapeutic travel in cycles, and the awakening enthusiasm engendered in the profession by the researches of Hess, Pacini, Steenbock and others has already attained such proportions as to amount to a physiotherapeutic renaissance. Physical therapy has passed through the period of probation and partly through its period of empiricism. It is now becoming more of a quantitative factor in therapy and physiotherapeutic apparatus is more nearly classified as instruments of precision than ever before. It is capable of harm as well as good, and is at the stage of development where vast expectations are aroused in the minds of many who are mentally unfit to grasp the therapeutic problems involved and to recognize its limitations. Fools rush in, etc., and many laymen are buying these quartz lights for self-medication or self-illumination in their own homes. It is high time for our profession to formulate in its own mind a definite attitude toward these abuses and make every effort to keep these therapeutic agencies under the control of the only man capable of proper therapeutic supervision—the well-trained medical man. The profession and the public are indeed fortunate in at last having available an authoritative body of medical scientists to whom we can look for guidance and advice, and on whose judgment we should all be glad to rely, and whose program we can all conscientiously endorse—the Council on Physical Therapy of the American Medical Association.

Resume of results in nasal and otological affections treated as private patients in the year ending December 31, 1926: These cases are selected from the entire group of ear, nose and throat cases



only in the following ways: 1. They were all seen in conjunction with or referred by a competent otolaryngologist. 2. All cases reported were treated more than twice, since observations and reports to be of value should be based upon results obtained in patients who had had the opportunity to obtain at least two or three treatments. Total number of cases, forty-three. Sinusitis, seventeen; nasal infection furuncle and carbuncle, five; deafness, five; otitis media, seven; otitis externa, nine.

*Sinusitis Cases*—The chief involvement was in the frontal and ethmoid in thirteen, and in the antrum in four. In all these cases drainage was first obtained by the proper nasal treatment, shrinkage of turbinates or surgery by the rhinologist, followed by diathermy to obtain immediate hyperemia, this by water-cooled quartz light via a flat prismatized nasal quartz applicator to give a subsequent hyperemia and consequent bactericidal effect. All cases then received the air-cooled light therapy recognized as efficient for its systemic effects. In the acute cases, which numbered twelve, the results were uniformly very good. Immediate symptomatic relief is obtained in practically all cases after the first one or two treatments. The average number of treatments in the acute and subacute series was four, the shortest three and the greatest number seven. The chronic cases do not do so well, especially if there has been multiple surgery, or if needed surgery (such as submucous resection) has been refused. In the five cases, one patient treated for a week was a Floridaphile, who had made winter excursions to the sunny south for her chronic sinus trouble for several years. This patient admitted slight improvement, but is classed as a failure since she insisted on making her yearly pilgrimage south. Another case was improved but is now at a standstill after ten treatments and is scheduled for a submucous resection, which should have been done in the first place. The other three cases were all post-operative, with good drainage but failure to clear up symptomatically. Results were uniformly good in these cases, an average of eight treatments being required to get results.

*Summary*—Acute cases with drainage usually obtain early marked relief in from two to six days by combined rhinological care and physical therapy. Chronic cases—results are only fair and depend largely on whether drainage has become well established and on the amount of tissue damage resulting from previous surgical interference.

*Nasal Infections*—Furuncle three, carbuncle two cases. In only one of these cases was the diagnosis of carbuncle obvious. This was in a man age sixty-three, who was referred to me by his otolaryngologist for quartz light therapy to a cellulitis of the upper lip and nose. Staphylococcus aureus. The patient was a bad risk to begin with, having arteriosclerosis, hypertensive nephritis, glycosuria and acetonuria. Drainage was established by electrodesiccation, the lip trephined

and Carrel-Dakin tubes inserted and irrigations done for forty-eight hours. In addition heavy water-cooled quartz light local irradiation and medical diathermy to obtain softening of the brawny edematous mass. Three weeks daily treatments were required but the patient made a complete recovery and now wearing an ordinary mustache, has no visible scar. The other cases were much simpler, and resolved within a day or so after heavy quartz light treatment. One case of beginning erysipelas in a nose and throat specialist, was aborted by one heavy regenerative dosage of air-cooled quartz light applied locally. It should be remembered that the air-cooled light may be used as a substitute for the water-cooled light by bringing it close to the lesion and covering contiguous normal areas with towels. However, for cavity work the water-cooled lamp is far more convenient and efficient.

*Summary*—Results in nose infections *very good*.

*Deafness*—Every physical therapist soon becomes besieged by the deaf, particularly if he has happened to have treated a few cases of chronic otitis media and to have observed in them the occasional happy result of improved hearing resulting from the resolution of chronic tympanic catarrhal inflammation. The ecstatic patient tells all his friends and they pass along the tidings of a new treatment which will miraculously cure deafness. Much against my will, I undertook to treat five patients this past year with the presenting symptoms of deafness. They all were apparently of the catarrhal variety. Although none had had the advantage of being tested by the audiometer, it is my belief that in four out of the five, who were elderly adults, the condition was an otosclerosis, and the results were uniformly nil. In the fifth case, that of a child, with chronic discharging ear following scarlet fever, results in the treatment of both the otitis media and the deafness were nil, and the parents advised to permit the otologist to proceed with the mastoid operation which he had advised.

*Summary*—Physical therapy in deafness *per se* has as yet produced no results in my hands. This series of cases is too small to be of value, and none of the cases were x-rayed, or even treated by diathermy with what I have learned lately to be the best technic, i.e., with one electrode behind the affected ear, and the other in front of the opposite ear. We should keep an open mind on this subject and be willing to try any method that promises relief of this usually intractable condition, but always should be extremely conservative in our prognosis as to the results.

*Otitis Media*—Acute cases, three. All were considered by consultant otologists to be threatening mastoids. All received radiant light for an hour, followed by diathermy, except the third one, who had a bulging ear and who received merely light therapy and paracentesis. Her culture

showing streptococcus hemolyticus, and the mastoid tip showing involvement, it was thought best not to lose any time in draining the mastoid cells. A simple mastoidectomy was done by the otologist and the patient made an uneventful recovery. The other two acute cases cleared up rapidly under the radiant light, diathermy and quartz light in the ear. One was well after three treatments and the other after five. The symptomatic relief obtained after the first treatment was marked in both cases.

Chronic cases, four. These were treated by radiant light one hour, cleansing of the ear canal, instillation of one percent zinc sulphate and positive galvanism (Friels method), and after this, by water-cooled quartz light. Results good in two, the discharge stopping after the second and fifth treatments respectively. In the third case fourteen treatments were unsuccessful and the patient was referred back to the otologist for mastoidectomy. The fourth case was partially successful, a bilateral case, one ear stopped draining after seven treatments, but the other which had had numerous operations, had apparently not had enough since it continued to discharge after twenty-one treatments. The ultimate results in the latter two cases are not at hand, but so far as physical therapy is concerned they should be considered failures.

*Summary*—Acute otitis media, good results sixty-six percent. Chronic otitis media good results in only fifty percent. This series is again too small, of course, to draw definite conclusions, but gives a rough idea of the comparative value of therapy in the two different conditions.

*Otitis Externa*—Nine cases. All infections introduced from the outside, by finger, infected

water ("bather's ear"), hair pins and tooth picks for removal of ear wax, etc. Mercurochrome, heavy radiant light and heavy quartz light both inside the meatus and by quartz lens compression to the infected preauricular nodes was used in all cases. In a few cases diathermy was used in addition. Result in all cases was very good. Immediate symptomatic relief was the rule, and total treatments varied from one to six, with an average of four. More recent cases in which heavy radiation is used, sufficient to "peel" the skin about the meatus and over the preauricular nodes, has resulted in cure in from one to two days.

*Final Summary*—1. Quartz light is of great value in infections of the ear, nose and throat. 2. Both systemic and local treatments should be administered. 3. Other physical agencies of adjuvant value such as diathermy and galvanism should be used when indicated. 4. Best results are obtained when teamwork exists between the otolaryngologist and the physical therapist, each using the special methods which he has mastered and applying them in a common sense manner for the common good of all concerned, including, of course, the patient who has the disease, as well as the disease which is afflicting the patient.

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REPORT OF THE COUNCIL ON  
PHYSICAL THERAPY

ON THE SALE OF ULTRAVIOLET GENERATORS  
DIRECTLY TO THE PUBLIC

The Council on Physical Therapy of the American Medical Association, on the basis of the present available evidence, is convinced that the sale of generators of ultraviolet energy to the public for self-treatment is without justification. The Council bases its condemnation of the sale of such apparatus for this purpose on the following grounds:

1. The uninformed public could not take the proper precautions in administering treatments and, as a result, severe general burns or grave injury to the eyes might ensue.
2. Those not familiar with the possibilities of such apparatus would be led to place unwarranted confidence in the therapeutic value of such treatment by the claims that might be made in the literature advertising such generators, and to un-

dertake to treat serious conditions not amenable to such treatment.

3. The unrestricted possession of such therapeutic means would tend to deprive people of expert diagnosis by encouraging them to make self-diagnoses.
  4. Such practice would encourage the sale of useless and fraudulent lamps which would be advertised as generators of ultraviolet rays, since the public would have no means at its disposal to determine the quality or quantity of the radiant energy emitted by such lamps.
- For the foregoing reasons, the Council on Physical Therapy considers as detrimental to public welfare the sale or the advertising for sale, directly to the public, of a generator of ultraviolet energy. Under rule 11 of its Official Rules, the Council will declare inadmissible for inclusion in its list of accepted devices for physical therapy apparatus manufactured by a firm whose policy is in this matter detrimental to public welfare.—*The Journal of the American Medical Association*, January 22, 1927, Vol. 88, p. 245.



## THE JOURNAL of the

### Indiana State Medical Association

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.

Editor and Manager

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## EDITORIALS

### BIRTH CONTROL AND ITS INFLUENCE ON FOOD SUPPLY

We have little sympathy with the idea advanced by some that within a few years we will be scrambling for food because the increase of population will outstrip the production of food. We already have a surplus of food, and there are millions of acres of untilled soil that can continue to produce an over-abundance of food for many decades. Thousands and thousands of acres of tillable soil are being thrown open in the west through the medium of irrigation, and the irrigated soil of the west is the most productive of any in this country, as most of it is in a region blessed with almost continuous sunshine which, with the moisture brought about by irrigation, offers the finest prospect in the world for enormous development in food crops. Therefore, this idea that we must have birth control because our population is increasing to the point where we will be unable to feed all the people seems ridiculous.

While we are on this subject of birth control we would like to quote from an article on "The Key to the Family Tree," appearing in the September number of the *Journal of the Medical Society of New Jersey* which points out that the power to produce or hold the lives of children at will is the most dangerous two-edged sword ever placed in the hands of human beings. If it cuts with one edge it will be an instrument of racial salvation. If it cuts with the other edge it will bring every civilization which tries it to its day of doom. The one central question is, who is going to have the children? The wise, provident and strong, or the weak, thoughtless and stupid? The plain fact is that if civilization is to continue, the higher classes must have more children. Numerous statisticians have proved that unless an average of three and three-quarters children are born to every couple who have any children at all, the race gradually will die out. Therefore, since some women cannot have children, and some will not, and some do not marry, and some children die, it is clear that a certain percentage of women must go on producing six to ten children. Therefore, it is idle talk to consider the question of a population too large to be fed with the food products now at our command or possible to command during the next hundred years or more. What we really need is an increase in the number of persons who really are willing to cultivate the soil,

and we are quite willing to admit that perhaps competition will force many of them to go to producing food instead of seeking other avocations.

### FEE BILLS FOR INDUSTRIAL CASES

Recently our attention was called to an old fee bill for professional services rendered in industrial cases that was offered to a member of the Indiana State Medical Association as a guide for his charges for services rendered in an industrial case and to be paid for by an insurance company. The fees quoted were ridiculously low, and, in fact, were those of at least twenty-five or thirty years ago when living conditions were entirely different than they are today. We are informed that a representative of an insurance company has presented this fee bill to a number of physicians and asked them to do the work for various industrial concerns for the fees named in the bill, and that much to the shame of these medical men they seriously considered the advisability of accepting appointments at the terms offered.

In commenting on this matter our informant stated that the men under consideration by the insurance company were not what could be called high class medical men, but that doesn't seem to matter with the insurance company. We might with all propriety ask, what about the injured workman who has to put up with inferior service? But that is another story. What we desire to call to the attention of medical men who are contemplating the acceptance of positions requiring industrial work is that the conditions of today are entirely different than they were even fifteen years ago. Today the laborer is better paid than ever before, and the employer of labor is getting his share of the proceeds of labor. Furthermore, the employer is protected by insurance, and that insurance is supposed to cover the fees necessary to pay for medical and surgical services rendered employees. The wildest stretch of imagination does not permit us to concede that the medical men should not share in the general increase of compensation that has come to followers of any and all vocations. Why should they be expected to accept compensation that is no more than compensation received twenty-five or thirty years ago, for services that at that time were not nearly so competent and trustworthy as the same services are today with our improved methods of handling medical and surgical work.

The only reason that an insurance company offers niggardly fees for industrial work is because it is a known fact that some medical men can be induced to accept such fees. In reality, the self-respecting medical man will not be led into any such trap. The others should be prevented from falling into the trap, and this can be accomplished through what the medical men in England call "a protective union to enforce the payment of just and consistent fees for medical and surgical services."

### MAKE THE PATIENT COMFORTABLE

*Physical Therapeutics* very properly says that "It is quite important that physicians should recognize the kind of patient the disease has just as much as the kind of disease the patient has." In other words, too often attending physicians overlook the patient and his comfort and give too much attention to the recognition of the disease. Our exchange is quite correct in saying that many physicians are afflicted grievously with bedside blindness, not that they do not know enough but that they do not see enough. If the medical student who is to become the doctor of tomorrow has had a broad laboratory training but is deficient in practical knowledge of the types and characteristics of individuals, and has not a keen sense that enables him to recognize and employ measures for relief, even pending the diagnosis, there is something wanting in the training that has left him deficient in the qualities which belong to the successful physician who will be of major service to his suffering patients. If any part of medicine today is neglected by the average graduate in medicine, it is the therapeutic end and that is the one which the patient seeks. Though we should not decry the value of diagnosis, we all must acknowledge that the greater accomplishment of the physician is the knowledge of how and what to do for the patient. The patient needs to be relieved from pain and made comfortable even if an immediate and accurate diagnosis cannot be established. It is the duty of the attending physician to pay attention to this all-important fact.

### PRESCRIBE APPROVED PHARMACEUTICALS

The Council on Pharmacy and Chemistry is one of the most valuable departments of our great American Medical Association, and yet we believe that its work is not appreciated by the thoughtful and trustworthy physicians as much as it deserves. In reality the work of the Council is to expose frauds as they pertain to the treatment of human ailments, to find out the worthlessness of nostrums, and protect the medical profession as well as the public from unscrupulous manufacturers of proprietary remedies. The work of the Council has broadened greatly during the last few years so that it now takes into consideration practically everything that is offered to the medical profession as an agent for the cure or alleviation of human ills. Recently the Council has attempted to protect the members of the medical profession against worthless and useless serums, vaccines and synthetics. In short, the Council today is the only medium to which the honest physician may turn for information, not misinformation, regarding proprietary medicinal agents, and for trustworthy information of whatsoever kind needed in the intelligent treatment of disease. Unfortunately not enough of the members of the medical profession are availing themselves of this wonderful source of information, and this is at-

tested by the fact that many worthless and fraudulent proprietary remedies still are sold to medical men and prescribed by medical men to the public through the inexcusable ignorance of the prescribers in not knowing what they are doing. As a matter of self-protection as well as protection of the public, every reputable medical man ought to consider it necessary to prescribe only those preparations which have received the approval of the Council on Pharmacy and Chemistry. Do not accept the word of some glib salesman that a proprietary preparation has not received the Council's approval because of delay in acting upon it, for usually that is a false and misleading statement in the beginning. And even if true the report might be made that prescribing an unknown preparation will be held in abeyance until the preparation has been approved by the Council.

We are heartily in accord with the suggestion that has been made that manufacturers who desire to market their wares to the medical profession should have the products labelled "accepted by the Council on Pharmacy and Chemistry of the A. M. A." This stamp of approval is enough to further the sale and use of any preparation of merit, and, on the other hand, it offers the only protection that the medical profession has against misrepresentation and actual fraud.

### ABUSE OF THE WASSERMANN TEST

We are free to admit that very few, if any, laboratory procedures have been so valuable and have done so much good in the clinical field as the Wassermann reaction. Unfortunately it has so happened that many incompetent laboratories, run for the most part by laymen, have taken up the test for commercial reasons. It also happens that physicians have placed explicit faith in it arbitrarily and have accepted findings without coincident study of the clinical features of the case in hand. James Herbert Mitchell, a syphilographer of note, presented this subject for discussion at the recent meeting of the American Medical Association (*Journal of the American Medical Association*, October 23, 1926, page 1351). The title of the discussion is the "Menace of the Slightly Positive Wassermann Reaction." The worst of it all is that the public has taken up the subject in its ignorant way, almost reducing clinical study of the Wassermann to chicanery. Mitchell says: "Many laymen believe that not only the presence or absence of disease but the name of the disease as well can be so determined. Such a state of affairs has set the stage for the appearance of the machine-made diagnoses of the Abrams followers. The value of the various 'serums' and blood tests has been extolled to the point at which the uneducated or the unthinking layman is led to believe that a blood test is infallible. Add to this the fear of venereal disease implanted in his mind by the anti-venereal propaganda, and we have a combination of circumstances with the greatest possibilities of harm.



\* \* \* Syphilophobia is increasing at an alarming rate in this country. More and more people are reading in magazines and newspapers of the consequences of syphilis, the ease of acquiring it, and its incurability."

Advertising extolling the Wassermann reaction and containing offers from laboratories to deal directly with the public have appeared in the late press, and like all such communications, awakens fear in the minds of the reader, leads to action, and the poor victim is started on his syphilophobic career. One such under the editor's care several years ago spent all her spare money on laboratories and the Wassermann reaction, finally ending up in a hospital for mental diseases.

Mitchell concerns himself in discussing slightly positive reactions and their danger to physician and patient alike and his data sustains his contention without a doubt. He tells of several human tragedies resulting from failure in checking off Wassermans, and still others done by human vultures who simply take the blood from the patient, throw the specimen in the sink and furnish a handsomely prepared certificate.

The discussion on Mitchell's paper was opened by Dr. Udo J. Wile, who said: "I am delighted to have heard one who has courage enough to cast at least some doubt on the value of biologic tests in the diagnosis of the disease. I think Dr. Mitchell was extremely temperate in his remarks. It might be proper to state that today the majority of syphilitic cases are not being treated for syphilis, but for a positive Wassermann reaction. I want to add my experience to his own and to state that it is far more difficult to cure patients, figuratively and literally, who have a positive Wassermann reaction and the fear and frequent psychosis that develop from it, than it is to cause the disappearance of the actual syphilitic lesions and to produce in the patient the protective background. The whole question bears directly on the prognostic value of this test. I would yield to no one any high estimation which I hold of this test as a diagnostic measure. I believe the most unfortunate situation has crept into the actual practice of medicine in the treatment of syphilis in interpreting or giving to this reaction a value, from a prognostic standpoint, parallel with its diagnostic significance.

"After all, we know nothing about the positive Wassermann reaction. In the absence of all other causes, a positive Wassermann reaction means the patient has or has had syphilis. I do not subscribe to the view that the presence of a Wassermann reaction in an otherwise healthy person who has had a background of years of treatment is necessarily an indication that he requires further treatment. The uncertainty of the ground that we stand on can be illustrated no better than by the fact that all of us are using different methods of determining what a positive or negative Wassermann reaction is.

"In a laboratory attached to one clinic a faintly positive Wassermann may become a positive, two plus or three plus, depending on the degree of sensitivity of reaction used. It would appear to me to be as sane to prognosticate the cause of typhoid by the Widal test if we had fifteen or twenty ways or methods of testing. Until all of us can use exactly the same technic, and until all of us can be dealing with persons who will react exactly the same way under given circumstances to the same biologic test, we shall never be in a position to speak authoritatively about the strongly or weakly positive cases and estimate thereby the degree of disease process or the degree of positive or negative that is present."

Could anything be more sensible or to the point? Dr. Wohl, of Omaha, a serologist, sustains all of the points made by the previous speakers, a quite natural thing for the high class laboratory man to do.

Dr. J. J. Moore, of Chicago, continuing the discussion, said: "As a laboratory man who has performed a few thousand Wassermann tests, I would not accept a four plus Wassermann reaction from any laboratory by any technic as diagnostic of syphilis unless it was supported by clinical evidence, a clear-cut history, or was repeatedly positive. \* \* \* I have a Wassermann report of one plus from a Chicago laboratory to a physician with the added statement that this means the patient has a little syphilis but not as much syphilis as a two plus or three plus. Fortunately, the American Medical Association is trying to clean up the laboratory situation, and I think that in a few years we shall have the menace of the weakly positive Wassermann reaction reduced."

Mitchell, in concluding the discussion, demonstrated the harm done patients by falsely positive reports, harm brought about in several ways, *e. g.*, disruption of families, syphilophobia and long course of unnecessary treatment with arsphenamin.

All speakers agreed that the Wassermann reaction is invaluable, but not an infallible laboratory sign. They all insisted that the positive Wassermann should be supported by clinical evidence and that good clinical evidence with negative Wassermann should be accepted as diagnostic.—*The Hahnemannian Monthly*, November, 1926.

#### THE KAHN REACTION IN THE DIAGNOSIS OF SYPHILIS

Since the Wassermann test was first announced and popularized as a diagnostic aid in syphilis, numerous investigators have offered simpler reactions for medical approval. The Sachs-Georgi, Meinicke and the sigma reaction of Dryer and Ward have been recommended for use as checks on the Wassermann test. The Kahn reaction is apparently the first precipitation method to be used with success independently of the Wassermann test. About a year has passed since the Michigan State Department of Health abandoned

the Wassermann test and made the Kahn test the standard method; during the interval it has reported to physicians more than eighty thousand Kahn tests. The medical department of the United States Navy also made the Kahn test standard recently. Houghton, Hunter and Cajigas, in this issue of *The Journal*, speak for the high degree of dependability of the Kahn test as a serum diagnostic method for syphilis. Kahn produced evidence to indicate that concentration of the ingredients that make up a precipitation test will hasten the formation of precipitates, while dilution of the ingredients will delay or prevent the formation of precipitates. He has urged also that for best results there must exist a correct quantitative relationship between the syphilitic serum and the antigen. Factors that favor precipitation are the use of an unstable mixture of antigen and physiologic sodium chloride solution, and the shaking or agitation of the mixture after the addition of the syphilitic serum. The Wassermann test has been in use for twenty years, and physicians are notoriously conservative in discarding well established procedures for new methods without superlative advantages. Even yet, however, serologists disagree on the method of preparing antigen and titrating complement and of other seemingly important steps in the performance of this test. The Kahn test may apparently be used in the small hospital laboratory, in the field laboratory, aboard ship or in the tropics with the same degree of accuracy. Probably the next few years will witness an interesting struggle between the Kahn and Wassermann tests. The Kahn test gives evidence of being a dependable method for the serum diagnosis of syphilis. Whether or not it has enough superior features entirely to replace the older method, only time will tell.—*Jour. A. M. A.*, December 4, 1926.

#### ESTIMATING VALUE OF SERVICES

A disgruntled Indiana newspaper editor, who probably did not like it because some poor doctor charged him a respectable fee for services, stated in the editorial columns of his paper, "Keep out of the clutches of the doctor." Why bless his puny soul, what the people ought to know is, "Keep out of the clutches of newspaper editors," for there isn't any one who can ruin reputations any quicker than a newspaper editor who nurses a grudge. We also might add, "Keep out of the clutches of a lawyer." The average doctor really has a conscience, but the average lawyer doesn't know what the word conscience means. One of our friends, who makes a specialty of surgery, operated a lawyer for appendicitis and charged him the very moderate fee of two hundred dollars for the services. Though the lawyer admitted that his life had been saved as a result of the operation, he kicked like a stuck pig about the size of the surgeon's bill. He hadn't recovered from his operation more than two or three weeks before he filed a claim against a railroad

company for the death of a man who had been killed through what was termed criminal carelessness on the part of the railroad company. The company gave the widow ten thousand dollars for the loss of her husband, and the lawyer had no scruples at all about taking five thousand dollars of the amount as his fee for securing the settlement. That is a fine example of conscience.

When it comes right down to the question of the milk of human kindness the medical man on the whole has about the most of that commodity of any one following any vocation. The truth of the matter is that the average doctor is too lenient, and if he really insisted upon getting what is his due he would be more respected. In fact he might eventually occupy the same plane as the lawyer who gets his and pays no particular attention as to whether the other fellow gets anything or not, and yet the legal profession is said to be very highly respected. Lawyers have rendered us services on many occasions, not keeping us out of jail or from the electric chair, but in minor civil suits, and never yet have we found one who had any modesty when it came to making the charge for the services rendered. We often have wondered what sort of a mental aberration there is in the average lawyer's makeup that permits him unblushingly to soak a client a large amount of money for a few minutes' work and even for very trivial service. The same fellows invariably are the ones who willingly accept a client who tries to avoid a very modest bill for professional services rendered by some physician or surgeon who perhaps has saved a life as the result of his ministrations. In analyzing the whole situation we are confronted with the query, who is responsible for this low estimate upon the value of medical and surgical services rendered? To our notion, the answer is, the members of the medical profession themselves.

#### INSURANCE FOR DOCTORS

*The Boston Medical and Surgical Journal* says that to a considerable degree doctors are slow to organize for protection and that the examples set by labor organizations should be studied to ascertain how far the profession may profit by co-operative plans which do not run counter to the fundamental principles of medical service. This comment is in connection with the statement that Massachusetts requires that all owners of registered automobiles must carry indemnity insurance and, in consequence, it brings up the question of the best and least expensive forms of insurance. It is claimed that medical men are better risks than the average driver of automobiles because of the education and discipline incident to the study and practice of medicine. The suggestion is then made that there is no reason why physicians should not organize a mutual insurance company and pay only the actual cost of protection required by the state. As a reasonable safeguard,



such a company could with propriety refuse to accept undesirable risks, and in the interest of reasonable protection to its members all doctors who could not meet reasonable requirements should be refused insurance. A company of this kind could be built up to take on all forms of indemnity insurance if it should come to pass that moderate rates are not available.

Perhaps we may offer the suggestion that fraternal insurance never has been quite satisfactory for long periods of time. Practically all the benevolent organizations have various types of protective insurance, and while some of these forms of protection still are going on, most of them have failed, with considerable loss to the members of the various orders supporting them. Perhaps failure has been due to mismanagement, but failure it is nevertheless. We know of one accident and health insurance company that takes medical men as the only risks accepted and seems to be not only in a flourishing condition but to afford insurance at a very reasonable rate, in fact, much less than it could be obtained from any regular company. We know of no particular reason why a company should not furnish any form of protective insurance, whether it pertains to health, accident, life or automobile indemnity, and make it very satisfactory and at reasonable rates if it is run on business lines and by thoroughly competent managers. In reality, it is largely a question of management, and with proper support on the part of the profession there is no such word as fail. Much of the cost of insurance as charged by the average indemnity company, of whatever kind, is due to large overhead expenses, enormous commissions to agents, and losses through the acceptance of bad risks. Whenever you minimize these losses by appropriate attention, then the rate, of necessity, must come down.

#### THE SOCIAL SIDE OF MEDICAL MEN

The social side of the practice of medicine should not be neglected. There are many medical men whom we only see casually, perhaps in our morning visits at the hospital or pass upon the street, and seldom come in contact with at medical societies, who in reality are very fine fellows when we get acquainted with them. One of the best ways to get acquainted with such men is social contact, and this can be accomplished by means of picnics, dinners, or other like entertainment. In preprohibition days it was the custom in many cities for a crowd of congenial doctors to adjourn from a medical meeting to a cafe or grille and around a board graced with numerous bottles of beer a social hour or two was spent in really getting acquainted with one another and without discussing scientific subjects. Those little beer-fests, if we may call them such, cemented many a friendship in the medical profession and caused many a man to forget his petty jealousies and ill-feeling against brother practitioners. We know of one Ohio town where on

one night a week medical men who can spare the time meet for the purpose of playing a game of poker with a ten-cent limit. Practically every member of the medical profession in the town attends these poker meetings at least once a month. The profession also maintains a live medical society, and it is said that there isn't a particle of jealousy or ill-feeling among the medical men of the town as a direct consequence of the friendship that has been brought about through these "poker" meetings. We are not recommending poker as a means of bringing about a friendly feeling among members of the medical profession, but we do say that the social side of medical men should not be neglected, and whenever you can get men together in social association, whether it is at a luncheon club or in a game of poker, and medical affairs for the moment can be forgotten, you are not going to have very much strife among medical men in that community.

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#### EDITORIAL NOTES

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##### DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital. We invite and urge you to use this Service.

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MANY Indiana doctors who within the past few years have seen cases of encephalitis that have recovered, are beginning to find out that the disease has curious latent effects, as evidenced by the development of various intracranial lesions and eventually death of the patient months or years after the original attack of encephalitis. Therefore, prognosis in these cases should be guarded.

THE Mayo Clinic has issued a warning concerning the danger of using mercurochrome by intravenous injection. Severe reactions, marked by prostration, chills and dysentery are common. Two of the 196 patients who received intravenous injections of mercurochrome at the Mayo Clinic during the past year died. Mercurochrome should be used intravenously only when emergency demands.

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MAIL addressed to the *Journal of Chiropractic* has been sent to us by the post office department with the statement that if it did not belong to us they did not know where it belonged. We have been called names, some good and some bad, but this is the first time that we have been associated with chiropractic in any of the accusations or

compliments. We cheerfully accept many burdens, but we do not like the idea of being weighted down by the charge that we are publishing a journal interested in chiropractic.

SEVERAL state medical associations have copied the plan adopted by the A. M. A. in having Speakers for their Houses of Delegates. We are under the impression that Indiana could adopt this plan with profit. We have noted that some of our presidents are poor parliamentarians and that oftentimes they are hopeless as well as helpless at a time when decisive action is required. Our work would be greatly expedited if we had a Speaker who is thoroughly familiar with parliamentary rules and who is "quick on the trigger" in an emergency.

THE supreme court of the United States has upheld the Chemical Foundation in its production of various drugs and chemicals which had, prior to the war, been made only in Germany and whose importation ceased with our entry into the war. This decision will have a far-reaching effect, and means that we shall not be dependent upon foreign countries for many valuable drugs and chemicals that are used in the arts and sciences. Furthermore, it means more and better drugs at a cheaper price than was possible when the manufacture and sale was controlled from abroad.

Judge announces that "water on the knee" is now a common occurrence for those girls who are out in the rain. We might add that we haven't noticed that any of the girls with exposed knees have "housemaid's knees" from scrubbing the kitchen floor, nor a sprained arm from helping mother with the family ironing. The girl who promenades down Main street with her dress about two inches above her knees usually is the one who gives mother little assistance in the housework but an endless amount of worry. From their actions we might think that instead of "water on the knee" they have water on the brain.

A SEEDY looking old fellow is reaping quite a harvest in Indiana from the sale of what he calls walrus oil, which he guarantees will cure deafness and many forms of blindness if used according to his direction. He claims to have been a miner who went to Alaska during the gold rush and was totally deaf at that time, but upon the discovery and use of the walrus oil his hearing was restored entirely. He thought so much of it that he decided to give suffering humanity the benefit of the discovery. He seems to find plenty of suckers who will buy the stuff at \$1.50 per bottle, and of course, as he wanders from place to place no one ever can bring him up for failure to secure satisfactory results.

THE captain of one of the Atlantic liners says that those who are subject to seasickness ought to

correct any hyperacidity before sailing. For the correction of seasickness he recommends alkaline treatment administered by mouth if it can be retained, and otherwise by rectal injection. We would like to supplement this statement by the assertion that there are some people who never go on the water without being seasick, and who have tried every remedy that ever has been recommended, but without securing relief. One old sea captain who has spent his entire life on the ocean once informed us that he always got seasick if it got very rough, and that nothing but smooth water and smooth sailing would relieve him.

WE are rather surprised to find so many physicians who candidly admit that they never keep any records of their patients. This is a serious mistake, and it is the cause of a great deal of lost motion to say nothing of occasional embarrassment. The man who is too busy to fill in records himself ought to have a paid clerk who can do the work for him. The records need not be cumbersome or exhaustive but will serve a very useful purpose if they have the salient facts recorded in a condensed way. Carefully prepared records not only save time and oftentimes embarrassment, but occasionally serious mistakes. A bright office girl or nurse can keep up these records, using the card index forms, and the records will prove more valuable still if made up with cross references.

THE December number of the *Cincinnati Journal of Medicine* refers to the dedication of a hospital with not a doctor on the program. That is not an uncommon spectacle. Consider, if you please, many of the plans for medical charities and benevolences and see how seldom medical men really are considered, except as a sort of half-way necessary evil. Every one connected with these charities and philanthropies gets his place in the sun, but the doctor, the one who really renders the service, generally is in the background and he is kept there whether he likes it or not. It would be well for some of the sponsors of these enterprises to take into consideration that the success of their institutions actually depends upon medical men and the quality of service which medical men render.

WE are delighted to know that at the next session of our State Medical Association every matter of importance that comes before the Association will be turned over to reference committees for analysis and consideration, after which a favorable or unfavorable report will be turned in to the House of Delegates for approval or disapproval. This is the only way through which we can get intelligent and unbiased analytical opinions on the subjects that are presented. Furthermore, it has a tendency to cut out all acrimonious and irrelevant discussion which oftentimes occurs when matters are brought up openly in the House of Delegates for consideration. The



best feature of all is that the existence of reference committees ought to shorten the work of the House of Delegates and prevent so much diversion of time from the scientific programs of the sections.

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THE Academy of Medicine, of Toledo, Ohio, has a doctor's service bureau which aims to furnish every variety of service to its members in connection with their avocational work. The members pay a small fee for this service, but the expenditure is returned many times in the value of the service rendered. The idea of a doctor's service bureau appeals to us very strongly and we believe that it could be adopted by many of the large medical societies with profit. In all probability such an enterprise could be adapted to the needs of physicians in a relatively large territory, say, in a certain district, and thus the doctors in some of the smaller communities could have the advantages of such a service. It ought to act as a sort of clearing house for doctors, and be a wonderful aid to them in saving time and money to say nothing of giving valuable information that is of service in ordinary work.

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THE Indiana State Medical Association has received many compliments for its commendable attitude in supporting the Council on Pharmacy and Chemistry in its fight for higher therapeutic standards, and for prohibiting commercial exhibits at the annual sessions of our association unless such exhibits meet the standard followed by the American Medical Association at its annual sessions. No longer can nostrums and quackery parade before the members of the Indiana State Medical Association at the annual session, and we are rather proud of the fact that we have established and maintain a high standard. Of course, it is a well known fact that *THE JOURNAL* will not accept the advertising of any questionable drugs or proprietary preparations, and it only remains for the members of the Indiana State Medical Association individually to refuse to prescribe pharmaceutical specialties that have not received the approval of the Council on Pharmacy and Chemistry of the A. M. A.

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THERE is much to commend what is being said by the medical press today concerning the necessity of better education for those who practice the specialties. We often have said that there are altogether too many half-baked specialists, and by this we mean that there are altogether too many medical men who, following a natural desire, hold themselves out as specialists without being particularly educated and trained for the position. Some of these men take a few weeks of rather indifferent lectures and training in their chosen specialty, whereas others have no special schooling or training of any kind whatsoever. It is these men who not only are a detriment to the public, and to the medical profession at large, but

to themselves as well. Our rules governing medical licensure ought to take this matter under consideration and forbid, under penalty, any man from engaging in a specialty who does not show sufficient education and training to justify the granting of privileges to practice a specialty.

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A FEW weeks ago we had the pleasure of attending a testimonial banquet arranged on the spur of the moment by a few nurses in honor of a distinguished surgeon of the city of Fort Wayne who was celebrating his seventieth birthday anniversary. From all parts of the state, and in fact from all parts of the United States, came messages of congratulation and sincere appraisal of the surgeon's work as a practitioner of medicine, a renowned surgeon, and an upholder of all the high ideals and traditions of the medical profession. It was a wonderful and a deserved tribute, and we have wondered why such features are not of more common occurrence. Why can't we say something good about many men while they are alive, when honor is due them, and not wait until they are dead before eulogizing them so extravagantly. The medical profession as a whole owes a debt of gratitude to many prominent members of the medical profession. What a shame that we do not oftener let these men know while they are alive that they have been appreciated.

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WE often are asked whether or not it is harmful to the eyes to look at moving pictures. Our answer always has been that those who suffer from eyestrain from motion pictures usually are those who are unable to do other ocular work without fatigue. There was a time when the motion pictures with their flickering and indistinctness were decidedly harmful to the eyes, but our modern pictures, which have been perfected to such an extent that they are steady and clear, are as safe for eye use as the ordinary book or newspaper, though of course, the patron of a moving picture theatre should use as much discretion in selecting his seat and getting a sufficient distance from the picture as he does in selecting the position for holding the book or paper when reading. Getting too close produces discomfort, and likewise getting too far away is apt to produce strain in the effort to delineate the features in the picture or read the legends. An interesting article concerning the effect of visual acuity of those viewing motion pictures was presented at the Dallas session of the American Medical Association, and the conclusion drawn from that paper, based upon experiments, showed that more fatigue was evident after forty-five minutes of reading current magazines than after viewing either black and white or colored motion pictures for one and one-half hours, if visual acuity is used as a criterion for fatigue. The moving picture fans should take comfort from this statement.

SOME of the large monthly lay periodicals are beginning to discuss the woeful inefficiency of our hospitals and are demanding that charity hospitals in particular be placed upon a strictly business basis. It is pointed out that not only is there much duplication of effort, but that the hospitals are imposed upon shamefully by people who receive attention at little or no expense when amply able to pay something for the service. It also is pointed out that the average hospital is badly managed anyway, from an economic standpoint, in that those without any business experience or ideas of system, or of business efficiency, are sometimes put in control. When it is considered that millions of dollars are either wasted or misapplied in the hospitals of the United States as a direct result of this inefficiency and misapplied charity, it can be understood why we are meeting with this belated demand for a reorganization of hospital management. What is said concerning the mismanagement of hospitals also pertains to the mismanagement of the practices of a majority of the members of the medical profession who use not the slightest business ability in their work. They waste effort upon routine things which someone else can do, and they pay little or no attention to the justice of the charity that they extend to many patients who are able and ought to pay something for the service rendered. Perhaps agitation of this whole matter by some of the large lay periodicals will result in a change of policy so much needed.

DR. MORRIS FISHBEIN, the capable editor of the *Journal of the A. M. A.*, in an address before the medical editors' convention in Chicago in November, said that nothing made his office force more tired than the medical "barnstormer" who utilizes a single paper before a large number of medical societies, purely for the purpose of advertising himself and drawing patients to himself, and then offers that same paper for publication in the *Journal of the A. M. A.* or some other medical periodical of large circulation. Sometimes the paper is a "boiled over" affair, or a re-hash of what any doctor can read in current medical literature. It may not have an original thought in it, yet the "barnstormer" succeeds in delivering it before numerous medical societies, oftentimes seeking the opportunity to so present it rather than waiting for an invitation. We recall that a few such "barnstormers" have inflicted themselves upon Indiana, and one or two of them have had the nerve to offer a compilation to us for publication after having offered it to various other periodicals. Usually such a man is blacklisted in all of the offices of medical editors. Sometimes a man is so wrapped up in his own importance that he is egotistical enough to think that medical journals will grab at his stuff and be very glad to publish it even though it has been published elsewhere, when as a matter of fact no self-respecting editor will publish anything that has not been

submitted for exclusive publication, unless perchance, he finds something of unusual interest and desires to publish it with due credit to the original publisher.

THE other day we heard a preacher say, "What this church needs is not more societies, but fewer societies. If you are going to organize another society, then organize one that will prevent the organization of more societies." As much might be said for our government. We need fewer bureaus and fewer commissions. We ought to have a bureau that will prevent the organization of any more bureaus. Already we are burdened with a species of paternalism that is becoming obnoxious. Our government is attempting to do everything for the individual, thus making the average citizen a dependent. The loss of individualism is a stroke at the very foundation of progress. We now have hundreds of thousands of employees on our government payrolls. One family out of every eleven is now on the political payroll. The ratio is increasing. The cost of maintaining our government with its numerous bureaus and commissions is a stupendous sum, and the people are groaning under taxation in consequence. President Coolidge already is calling for retrenchment and a reduction in the number of government employees. He also very wisely has asked for a cutting down of useless and burdensome subsidies. There is much over-lapping of effort in our government activities, and the lack of useful accomplishment on the part of many of the bureaus and commissions of our government is notorious. Eventually an aroused public sentiment will demand a radical modification in our present plan of paternalistic management of governmental affairs. Let us hope that this awakening comes before another national election, so that the candidates for office will know the temper of the people.

IN urging doctors to take some interest in civic and political matters we feel disposed to suggest that they pay some attention to the question of national defense and talk to their representatives in Congress concerning the matter. It may be thought that we naturally are a peaceable nation, but at the same time we must protect ourselves from the covetous eyes of other nations, and the best way to do that is to be well prepared in case war comes unawares. At the present time our defense is inadequate. Our navy has been permitted to deteriorate, and even the ratio of naval power established by the disarmament decree has not been followed. Our standing army also is reduced to a very low level and even what we have is inadequately trained and niggardly supported. The retrenchment policies of Coolidge have hit the army and navy the same as everything else, and in consequence many of our soldiers haven't decent accommodations, and little provision has been made for their training. Soldiers must be trained



to shoot so that when their services are needed they can accomplish something, but our present policy of retrenchment has cut down on the necessary ammunition for target practice, and it couldn't go much farther without leaving our soldiers in the position of not knowing what gun powder even smells like. Furthermore, you can't expect a man to feel and act like a soldier unless you dress him well and feed him well. We pay the ordinary soldier twenty-one dollars a month, and if he has a decent uniform, or anything to embellish it with, he has to buy it himself. He cannot be contented and happy when occupying barracks that are not much better than furnished for the army mule, and impossible as it may seem, we actually feed the soldier on thirty-one cents per day. Even the secretary of the army openly says that our treatment of the soldier in time of peace is a national disgrace. Our air service is notoriously inefficient and inadequate. While all the other leading foreign nations are building up their air service to a commendable state of efficiency we are doing nothing worth mentioning. The next war will be settled by the air forces, and battleships will hug a safe harbor if one can be found, for they cannot compete with the modern war airplane. As a creditor nation we are despised the world over, and that usually is the way. When war comes, as it may at any time, it will come out of a practically clear sky, and it will find us totally unprepared to defend ourselves successfully unless something radical is done to improve the situation that exists today. No longer can we talk about our splendid isolation, for we are open to attack on every hand. At present there is some agitation in the press of the country concerning the necessity of improving our defense, and we think that it would be a good thing for voters to let their congressmen know their sentiments on this question of preparedness. Our nation is rich, but it could not defend itself successfully against an attack by any of the first-class nations of the world, and we would fall an easy prey if there occurred the slightest pretext for attacking us. It is far better to be safe than sorry, and the best way to avoid war is to be well-fortified so that our enemies will fear to attack us.

### DEATHS

ED. WERTZ, M.D., of Flatrock, died January 14th, aged fifty years.

W. P. DARROCH, M.D., of Cayuga, died February 2nd, aged eighty-two years. Dr. Darroch graduated from the Kentucky School of Medicine, Louisville, in 1877.

THOMAS B. GULLEFER, M.D., of Greensburg, died January 27th, aged seventy-six years. Dr. Gullefer graduated from the Medical College of Indiana, Indianapolis, in 1881.

C. W. BRADLEY, M.D., of Evansville, died January 21st, aged fifty-one years. Dr. Bradley graduated from the Illinois Medical College, Chicago, in 1909. He was a member of the Vanderburg County Medical Society, the Indiana State Medical Association and the American Medical Association.

A. W. DAVIDSON, M.D., of Brownsburg, died January 10th, aged eighty-four years. Dr. Davidson was a member of the Hendricks County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the College of P. and S. of Indiana, Indianapolis, in 1876.

B. S. ROSE, M.D., of Evansville, died February 8th, in Bradenton, Florida, where he had gone to spend the winter. Dr. Rose was fifty-seven years of age. He was a member of the Vanderburg County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Louisville Medical College, Louisville, Kentucky, in 1894.

HERMAN A. DUEMLING, M.D., of Fort Wayne, died February 4th, aged fifty-five years. Dr. Duemling was chief surgeon of the Lutheran Hospital of Fort Wayne and head of the clinic which bore his name. He not only was prominent in his profession but was a leader in church activities in northern Indiana. He was graduated from the Missouri Medical College, St. Louis, in 1892, and was a member of the Allen County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

### NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. A. H. SHAFFER, of Huntington, celebrated his ninety-eighth birthday January 15th.

DR. B. G. KEENEY, of Shelbyville, has moved his office from South Harrison street to 120 West Jackson street.

DR. G. F. SMITH, of Lawrenceburg, and Mrs. Frannie Hoffman, of Petersburg, Kentucky, were married January 19, 1927.

THE Fort Wayne Medical Society held a meeting at the Wayne Pharmacal Building, February 8th. Dr. L. Potter Harshman presented a paper.

THE sixty-third annual meeting of the American Ophthalmological Society will be held at the Chateau Frontenac, Quebec, on June 27, 28 and 29, 1927.

THE Ohio, Indiana, Michigan and Kentucky Section of the American College of Surgeons held a meeting at Dayton, Ohio, February 21 and 22, 1927, with headquarters at the Miami Hotel.

THE Chicago Ophthalmological Society and the Chicago Medical Society held a joint meeting. Papers were presented by Drs. Robert von der Heydt, Frank Brawley and E. R. Crossley.

THE physicians of Sheridan gave a dinner for the Hamilton County Medical Society at the Thistlewaite Hotel, Sheridan, February 8th. Dr. Louis Segar, of Indianapolis, presented a paper.

THE February meeting of the Madison County Medical Society was held in Anderson, February 16th. Dr. Robert Moore, of Indianapolis, addressed the meeting on the subject of "Rheumatic Heart Disease."

AT a dinner meeting of the Tri-County Medical Society held at North Vernon, January 19th, Dr. Charles D. Humes, of Indianapolis, presented a paper on "Syphilis and Its Relation to Surgery and Medicine." A general discussion followed.

THE following examination dates have been assigned by the American Board of Otolaryngology: Washington, D. C., at the Episcopal Eye, Ear and Throat Hospital, Monday, May 16, 1927, at 9:00 o'clock; Spokane, Washington, Saturday, June 4, at 9:00 o'clock.

THE following officers for the Wells County Medical Society have been elected for 1927: Dr. W. D. Brickley, Bluffton, president; Dr. Louis Severin, Bluffton, vice-president, and Dr. Max M. Gitlin, Bluffton, secretary-treasurer.

DR. CHARLES D. HUMES, of Indianapolis, addressed the dinner meeting of the Jasper-Newton County Medical Society on January 27th. A clinic was held and the subject of institutional care and training for the mentally enfeebled was discussed by all the doctors in attendance.

THE Northeastern Indiana Academy of Medicine held a meeting at Gawthrop Inn, Kendallville, March 3rd. Following dinner, Dr. George H. Gardner, of Chicago, presented a paper, his subject being, "Recent Developments in the Inter-Relation of Gynecology and Internal Medicine."

DR. B. W. EGAN, of Logansport, was elected president of the Indiana Academy of Ophthalmology and Otolaryngology at the annual meeting held recently in Indianapolis. Dr. J. R. Gilliom, of Terre Haute, was elected vice-president and Dr. C. W. Rutherford, of Indianapolis, secretary-treasurer.

THE sixth annual convention of the International Society for Crippled Children was held in Cincinnati, February 16 and 17. The officers of this society are Edgar F. Allen, Elyria, Ohio, president; Paul H. King, Detroit, vice-president; H. E. Van de Walker, Ypsilanti, Michigan, treasurer, and Harry H. Howett, Elyria, secretary.

THE United States Civil Service Commission announces open competitive examination for Physiotherapy Aide, Physiotherapy Pupil Aide and Physiotherapy Assistant. Applications must be on file at Washington, D. C., not later than May 28, 1927. Full information and application blanks may be secured from the United States Civil Service Commission, Washington, D. C.

THE United States Civil Service Commission announces open competitive examination for Social Worker (Psychiatric). The examination is to fill vacancies in the Veterans' Bureau and in positions requiring similar qualifications throughout the United States. Full information and application blanks may be obtained from the U. S. Civil Service Commission, Washington, D. C.

THE United States Civil Service Commission states that a number of hospitals of the Veterans' Bureau are sorely in need of occupational therapy aides in arts and crafts, agriculture, and trades and industrial occupations, and also physiotherapy aides, pupil aides, and assistants. These workers are needed in considerable numbers in connection with the rehabilitation of disabled soldiers and sailors. Examinations for these positions are now open. Full information and application blanks may be obtained from the U. S. Civil Service Commission, Washington, D. C., or from the secretary of the U. S. Civil Service Board at the post office in any city.

EXAMINATIONS of candidates for entrance into the Regular Corps of the U. S. Public Health Service will be held at the following places on May 2, 1927: Washington, D. C.; Chicago, Illinois; New Orleans, La.; San Francisco, Calif. Candidates must be not less than twenty-three or more than thirty-two years of age and must have been graduated in medicine at some reputable medical college, and have had one year's hospital experience or two years' professional practice. Requests for information or permission to take this examination should be addressed to the Surgeon General, U. S. Public Health Service, Washington, D. C.

THE United States Civil Service Commission announces open competitive examination for Assistant Medical Officer, Associate Medical Officer, Medical Officer and Senior Medical Officer. Applications will be rated as received by the United States Civil Service Commission at Washington



until June 30, 1927. There is especial need for medical officers qualified in tuberculosis or neuropsychiatry, for duty at hospitals of the Veterans' Bureau. There are a number of vacancies in positions in the Indian service which call for training in general medicine and surgery. In addition, there is opportunity for appointment of specialists in practically all branches of the profession. In addition to the Veterans' Bureau and the Indian service, appointments from these examinations will be made to the Public Health Service, the Coast and Geodetic Survey, the Panama Canal Service, the Departmental Service at Washington, and other branches. Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C.

THE fifty-fourth annual session of the Northern Tri-State Medical Association will be held at Michigan City, April 12, 1927. Meetings will be held at the Spaulding Hotel; clinics will be held at the New Clinic Hospital. In the morning from 8:30 to 12:00 clinics will be held under the direction of J. H. Andries, professor of surgery, Detroit Medical College; Charles P. Emerson, dean of the Medical Department of Indiana University; Charles L. Mix, professor of medicine, University of Illinois; Charles Addison Elliot, professor of medicine, Northwestern University; A. Kellogg Speed, assistant clinical professor of surgery, University of Illinois. In the afternoon, from 2:00 to 6:00 p. m., papers will be presented by Drs. J. H. J. Upham, professor of medicine, Ohio State University; Charles P. Emerson, of Indiana University, and Preston M. Hickey, professor of roentgenology, University of Michigan. Following a banquet at the Spaulding Hotel, Dr. Frank Smithies, professor of medicine, University of Illinois, will present a paper. The officers for this society are Dr. H. H. Martin, Laporte, Indiana, president; Dr. William Donald, Detroit, Michigan, vice-president; Dr. R. V. Hoffman, South Bend, Indiana, treasurer, and Dr. W. W. Beauchamp, Lima, Ohio, secretary.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the A. M. A.:

Robert A. Bernhard:

Saf-T-Top Mercurochrome Solution 2 cc.

Kansas City Oxygen Gas Co.:

Ethylene for Anesthesia (Kansas City Oxygen Gas Co.)

Eli Lilly & Co.:

Erysipelas Streptococcus Antitoxin-Lilly (Concentrated Globulin).

Parke, Davis & Co.:

Antistreptococcus Serum 20 cc. piston syringe.

Antistreptococcus Serum 50 cc. piston syringe.

Swan-Myers Co.:

Arizona Ash Concentrated Pollen Extract-Swan-Myers; Crab Grass Concentrated Pollen Ex-

tract-Swan-Myers; Goose Grass Concentrated Pollen Extract-Swan-Myers; Mountain Cedar Concentrated Pollen Extract-Swan-Myers; Ox-Eye Daisy Concentrated Pollen Extract-Swan-Myers; Plantain Concentrated Pollen Extract-Swan-Myers; Yellow Fox-Tail Concentrated Pollen Extract-Swan-Myers.

## SOCIETIES AND INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

January 17, 1927.

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D., chairman; Murray N. Hadley, M.D., J. A. MacDonald, M.D.; Frank W. Cregor, M.D., president of the Association, and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held January 10th read, corrected and approved.

The release, "Attacking Health Superstitions," was read and approved for publication January 31.

The following bills were approved for payment:

Hess Duplicator Supply Co.	\$5.50
Chas. D. Zacher & Sons	3.03

\$8.53

Letter formulated and approved to be sent to secretaries of county medical societies and councilors and officers of the Association urging the various county societies to co-operate with the Parent-Teachers' Associations in the diphtheria prevention campaign. Secretary was instructed to write secretary of the Parent-Teachers' Association enclosing copy of this letter.

Secretary reported visit from secretary of the Indiana High School Athletic Association to arrange plans to make an intensive and scientific study upon the effect of basketball tournament play upon high school athletes. Secretary instructed to invite secretary of the Indiana High School Athletic Association to attend some future meeting of the Bureau in order that this plan for tournament examination may be completed.

Speaker obtained for Rotary Club noon luncheon at Connersville, January 24.

Because of the recent number of deaths to Indiana motorists due to carbon monoxide gas, the secretary was instructed to prepare an article for future release.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole, January 24, 1927.

WM. N. WISHARD, M.D.,

Chairman.

THOS. HENDRICKS,

Secretary.

### WAYNE-UNION COUNTY MEDICAL SOCIETY February, 1927.

The Wayne-Union County Medical Society met at the Reid Memorial Hospital, Richmond, Indiana, on December 9, 1926. Officers for the ensuing year were elected as follows: President, Richard Schillinger; vice-president, George R. Hays; secretary-treasurer, Harry Plummer Ross. A banquet was served by the hospital staff. Following the banquet a paper, "The Physician Versus the Public," was presented by Dr. Oliver N. Huff, of Fountain City, Indiana.

The Wayne-Union County Medical Society met for a dinner meeting at the Arlington Hotel, Richmond, Indiana, on January 27, 1927. Dr. George S. Bond, of the Department of Medicine of the Indiana University School of Medicine, gave a paper on, "The Management of the Goitre Patient," in the absence of Dr. Willis D. Gatch of the Department of Surgery of Indiana University School of Medicine, who was to speak on, "Surgery of the Thyroid." Dr. Harold Trusler, of Cumberland, Indiana,



read the paper prepared by Dr. Gatch and also spoke on the recent research conducted on "Acute Intestinal Obstruction" by himself under the direction of Dr. Gatch. The research work was sponsored by the Eli Lilly Co., of Indianapolis, Indiana.

HARRY PLUMMER ROSS, Secretary.

## TRUTH ABOUT MEDICINES

### NEW AND NONOFFICIAL REMEDIES

**GYNERGEN.—ERGOTAMINE TARTRATE.**—The normal tartrate of the principal alkaloid of ergot. Gynergen stimulates the motor nerve endings of the sympathetic division of the autonomic nervous system, thus causing an increase in blood pressure, contraction of the uterus, etc. It is proposed for use when the action of ergot to produce uterine contractions is desired. It is contraindicated when a tonic contraction of the uterus is undesirable. Gynergen is administered intramuscularly or hypodermically, and orally. The product is supplied in the form of Ampules Gynergen, 1.1 cc. and Tablets Gynergen, 0.001 Gm. H. A. Metz Laboratories, Inc., New York.

**AMPOULES GLUCOSE (DEXTROSE, U. S. P.) LILLY 10 Gm., 20 CC.**—Each ampule contains Dextrose, U. S. P., 10 Gm.; cresol, 0.1 per cent and distilled water to make 20 cc., buffered with sodium phosphate. Eli Lilly & Co., Indianapolis.

**AMPOULES GLUCOSE (DEXTROSE, U. S. P.) LILLY, 25 Gm., 50 CC.**—Each ampule contains Dextrose, U. S. P., 25 Gm., distilled water to make 50 cc., accompanied by an ampule containing 2 cc. of a buffer solution. Eli Lilly & Co., Indianapolis. (*Jour. A. M. A.*, Jan. 8, 1927, p. 101).

**ETHYLENE FOR ANESTHESIA.**—It contains not less than 98 per cent by volume of ethylene. Trials on human subjects have confirmed the anesthetic and analgesic value of ethylene as demonstrated by animal experiments. Deep surgical anesthesia is stated to be produced easily, and analgesia comes on readily and apparently long before anesthesia is established. A considerable number of trials give promise that ethylene is of value for the production of surgical anesthesia and that it has advantages over nitrous oxide. Ethylene for anesthesia is supplied in compressed state in metal cylinders.

**ETHYLENE FOR ANESTHESIA (KANSAS CITY OXYGEN GAS CO.)**—A brand of ethylene for anesthesia—N. N. R. Kansas City Oxygen Gas Co., Kansas City, Mo. (*Jour. A. M. A.*, Jan. 29, 1927, p. 323).

### PROPAGANDA FOR REFORM

The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: Glycero-Celery Tonic (Brunswig Drug Co.), consisting of potassium bromide, glycerin, extracts of plant drugs, sugar, alcohol and water. T. S. B. Liverclean (C. M. and R. Tompkins), essentially Glauber's salts, Epsom salts, sugar and a trace of plant extract dissolved in water. Womanette (Capital Remedy Co.), consisting of potassium bromide, extracts of plant drugs (including sassafras) alcohol, water and a trace of salicylate. Sirup of Ambrozoin (American Apothecaries Co.), consisting essentially of ammonium chloride, sodium and potassium bromides, small amounts of plant extracts, a trace of creosote, benzoic acid, alcohol, sugar and water. Angelus Compound Syrup of Hypophosphites (Brunswig Drug Co.), consisting of sodium, iron, manganese, quinine and strychnine hypophosphites, traces of calcium and potassium salts, glycerin, sugar and water. Brunswig's Compound Fluid-extract Buchu (Brunswig Drug Co.), consisting essentially of potassium acetate, extracts of plant drugs, glycerine, alcohol and water. Allen's Lung Healer (H. J. Allen Co.), a partly emulsified mixture of mineral oil, about 30 per cent, volatile oils, including anise oil, about one-half of 1 per cent extracts of plant drugs, including licorice, sanguinaria, benzoic acid, sugar and water. Whitlock's U-GR-GL (Cherokee Remedy Co.), essentially a dilute, watery solution of washing soda

flavored with menthol. (*Jour. A. M. A.*, Jan. 1, 1927, p. 48).

**THE LEAD TREATMENT OF CANCER.**—At a recent meeting of the British Medical Association, a full summary of the results to date was presented by members of the staff of the Liverpool Medical Research Organization. The clinical survey indicates that there is promise of therapeutic benefit in a few selected cases of otherwise hopeless cancer. The preliminary task before treatment can be begun is the selection of patients who may possibly obtain benefit. The lead suspension which Blair Bell uses contains fairly fine particles, some of which are metallic lead, and some lead hydroxide and lead carbonate. The mixture is more toxic than pure colloidal lead but it is also more effective in the destruction of tumors. Commercial products are not as yet available, but several laboratories in this country and in England are experimenting with various preparations, hoping soon to be able to develop a standardized and reliable product. It seems that Blair Bell has shown that when employed under cited limitations and by those who possess proper laboratory facilities and clinical experience, lead therapy offers to a small number of persons affected with inoperable tumors, a chance to escape the consequences of the disease. But before any widespread use can be made of the method, some means of removing lead from the body to control acute or chronic poisoning should be developed. The whole situation is thus frankly in the experimental stage. To carry out the treatment at all, requires hospitalization of the patient for some months, laboratory and clinical facilities not everywhere available and funds for frequent transfusions. It seems improbable that the method will ever replace surgery or compete with irradiation, but it has already accomplished something in patients in whom one or both of these procedures had failed. (*Jour. A. M. A.*, Jan. 8, 1927, p. 103).

**NONSPECIFIC PROTEIN ADMINISTRATION.**—The intravenous injection of typhoid vaccine with an initial dosage of 50 millions, each subsequent dose increased by 100 millions, and given at four-day intervals, is one of the most reliable means of producing fever. It is a drastic measure and one should be certain that the patient's vital organs are sufficiently healthy to withstand the attacks of fever thus produced. The intramuscular injection of milk skimmed by centrifugalizing and sterilized by boiling in the water bath for ten minutes, has good pyrogenic properties without great toxicity. The usual dose is 5 cc., gradually increased to 10 cc. With those who have a tendency to strong febrile reactions, small doses should be given at first. The injections must be adjusted to avoid severe reactions and anaphylactic shock. (*Jour. A. M. A.*, Jan. 8, 1927, p. 119).

**KLORON.**—Qualitative tests made in the A. M. A. Chemical Laboratory indicate that Kloron Tablets (J. I. Holcomb Mfg. Co.) contain Chloramine-U. S. P. as their potent ingredient. The claims made for the preparation are typical of the extravagant exploitation of official products by the "patent medicine" route. (*Jour. A. M. A.*, Jan. 8, 1927, p. 119).

**SODIUM BROMIDE INTRAVENOUSLY.**—Sodium bromide may be injected intravenously provided the liability of such an injection causing colloidoclastic shock is reckoned with. It seems, however, that mere "gastric distress" would call for better dilution of the dose given by mouth, as with a tumblerful of milk, or for introduction by way of the rectum, rather than intravenous injection. (*Jour. A. M. A.*, Jan. 8, 1927, p. 120).

**CASS TREATMENT FOR RHEUMATISM.**—One hundred and thirty-seven West Sixty-Second Street, Chicago, houses a choice line of quackery. Under the names "Western Medical Association" and "Vernon Laboratories" a fake "epilepsy cure" is exploited on the mail order plan. Under the name "Cass Laboratories," nostrums for rheumatism, sciatica, neuralgia, lumbago and gout are sold—also through the United States mails. The A. M. A. Chemical Laboratory reports that the "Cass Treatment" consists of pink tablets, "Special Saline Compound" and gray tablets. The Laboratory found the pink tablets to contain 0.6 Gm. of sodium bicarbonate



per tablet. The "Special Saline Compound" was found to be essentially flavored magnesium sulphate. The gray tablets were found to contain essentially 0.16 Gm. acetylsalicylic acid, 0.13 Gm. cinchophen and 0.3 Gm. charcoal tablet. From the laboratory's report it is seen that this wonderful discovery "developed under the direction of the Head Professor of Chemistry at one of the nation's largest Universities," and declared by "two of the foremost Medical Scientists in this country" to be superior to anything else in its line, is merely a combination of acetylsalicylic acid and cinchophen with sodium bicarbonate and magnesium sulphate. (*Jour. A. M. A.*, Jan. 15, 1927, p. 189).

**PHYSICAL THERAPY AND PSEUDOPHYSICS.**—Much of the literature on physical therapy has apparently been written with an eye to the royalty statement or the publicity returns rather than to the possibility of scientific criticism. These treatises become impressive, in size, at least, by the inclusion of statements on the physics of the apparatus culled almost in toto from the advertising and descriptive matter published by a manufacturer. This practice might be commendable if the physical concepts were not often wholly at variance with the concepts generally accepted by physicists. The physician who desires a substantial knowledge of physical therapy must choose his sources of information carefully. (*Jour. A. M. A.*, Jan. 15, 1927, p. 175).

**DIAMEL IN DIABETES.**—Diamel tablets are manufactured by the Maltbie Chemical Co. They are stated to contain "Lithium Carbonate 1½ grs.; Sodium Arsenate 1/20 gr.; Strychnine Arsenate 1/180 gr.; Ext. Jambul Seed ½ gr.; Ext. Gentian, ½ gr." The product is marketed with the claim: "This tablet is employed for the reduction and elimination of sugar in the urine, which it is said to do rapidly. A trial will speedily prove the efficiency of this formula." None of the components of Diamel tablets have any specific effect on the course of diabetes. (*Jour. A. M. A.*, Jan. 22, 1927, p. 267).

**I-ON-A-CO—THE MAGIC HORSE COLLAR.**—California was not satisfied when it gave us the greatest piece of quackery, the electronic reactions of Abrams. Now we are treated to another piece of electrical hocus-pocus which comes from California: I-on-a-co, alleged to have been invented by one Gaylor Wilshire, and exploited by the I-on-a Company of Los Angeles. The device, one gathers from the advertising, will cure cancer, Bright's disease and paralysis, change gray hair back to black and give girls who use it a "permanent wave." A committee which investigated the device, reported that I-on-a-co is simply a coil of insulated wire about 18 inches in diameter with a plug that permits the coil to be attached to an electric light socket. There is also a smaller coil that plays no part in the alleged curative use of the I-on-a-co, but plays an all-important part in the magical features of the scheme. This coil has its two ends attached to a miniature light socket containing a small flashlight globe. When the larger coil is plugged into an alternating current electric light socket there is, of course, generated within the large coil a weak fluctuating magnetic field. This will cause the globe in the small coil to light up when it is brought in close proximity to the large coil. This phenomenon, while elementary to a degree, furnishes for the uninitiated that element of mystery which is so necessary to the successful exploitation of any alleged cure for human ailments. The I-on-a-co is used by placing this magnetic horse collar over the neck, around the waist or around the legs of the person who thinks he is going to be helped by a piece of buncombe of this sort. (*Jour. A. M. A.*, Jan. 22, 1927, p. 262).

**SALE OF ULTRAVIOLET GENERATORS TO THE PUBLIC.**—The Council on Physical Therapy, on the basis of the available evidence, contends that the sale of generators of ultraviolet energy to the public for self-treatment is without justification. The Council bases its condemnation of the sale of such apparatus on the ground that harm may result from such use by the public; because unwarranted confidence in the therapeutic value of treatment with such apparatus may lead to attempts to treat

serious conditions; because the professor of such apparatus would fail to obtain a correct diagnosis of his condition; and because the practice would encourage the sale of useless and fraudulent apparatus. (*Jour. A. M. A.*, Jan. 22, 1927 p. 245).

**SPÄHLINGER TREATMENT OF TUBERCULOSIS.**—Notwithstanding the fact that the Spählinger treatment of tuberculosis was secret and that evidence in its favor had not been made generally available, Spählinger and his friends have repeatedly attempted to secure government endorsement of the preparation in England and to secure funds for its development. Now the records of ten patients injected by Spählinger personally with this remedy have been reported by Dr. Thomas Nelson in the *London Lancet*. These records are decidedly unfavorable to the treatment. The evidence in favor of the Spählinger method of treatment of tuberculosis is not sufficient at this time to warrant an extensive trial. The burden of proof is still on Spählinger, who should at least show that in a considerable number of cases studied under controlled conditions the remedy will accomplish more than can be accomplished by the method of treatment now practiced in well regulated institutions for the treatment of tuberculosis. (*Jour. A. M. A.*, Jan. 22, 1927, p. 248).

**CHEMICAL EXAMINATION OF ETHYLENE FOR ANESTHESIA.**—In consideration of the recently reported deaths from ethylene anesthesia, the A. M. A. Chemical Laboratory decided to re-examine the brand of ethylene for anesthesia accepted for New and Nonofficial Remedies, namely that of the Ohio Chemical and Manufacturing Co. As the Kansas City Oxygen Gas Co. had just submitted its product to the Council, this brand was also examined. The brand of ethylene which was used in the fatal cases was not examined and is not one of the brands reported on. The specimens were examined according to the methods of New and Nonofficial Remedies and in addition submitted to a more delicate test for carbon monoxide. They met the standards and in none was carbon monoxide found to be present. The laboratory recommends that physicians use only the brands of ethylene which stand accepted for inclusion in New and Nonofficial Remedies. (*Jour. A. M. A.*, Jan. 29, 1927, p. 322).

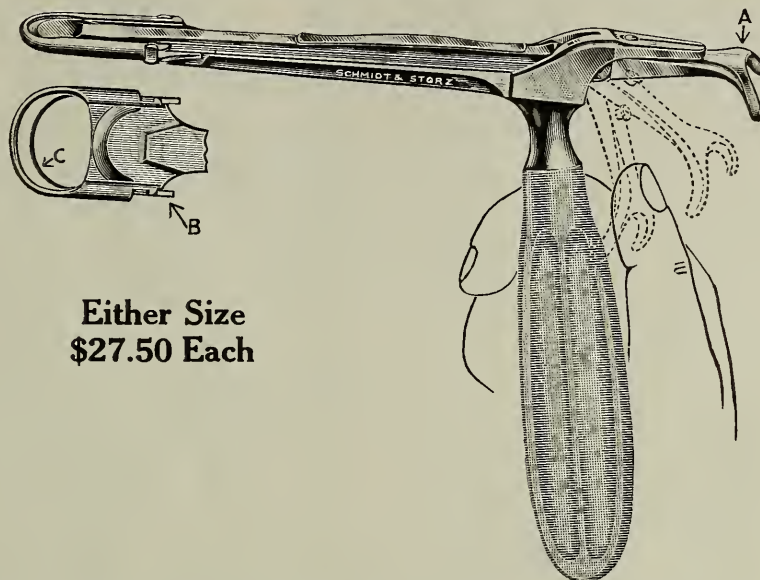
**RATTLESNAKE POISON.**—According to Afranio Do Amaral, "A General Consideration of Snake Poisoning," the use of potassium permanganate in the treatment of rattlesnake bite is of little value. Specific treatment with potent antivenin is generally admitted to be efficient, and the only means of neutralizing the poisons and arresting the action of the toxic elements. During the last summer a few tubes of anticrotalic serum prepared in Brazil were used with promising results in Texas. (*Jour. A. M. A.*, Jan. 29, 1927, p. 342).

**THE FLORENCE LABORATORIES FRAUD.**—The federal authorities have issued a fraud order closing the mails to the Florence Laboratories, the Florence Products Corporation and F. H. Shearer. The evidence brought out that Mrs. Shearer exploited three nostrums, an asthma remedy, an eye tonic and a cod liver oil preparation. The asthma nostrum—Florence Formula—was a potassium iodide and Fowler's Solution combination; the eye tonic, which seems to have been known as "Eyrone" contained glycerin, procaine, boric acid, zinc sulphate and salicylic acid, while the cod liver oil tablets contained cod liver extractives, with alleged vitamin A and vitamin B material. The remedies were prepared by George A. Breon & Co., Manufacturing Chemists, Kansas City, Mo. (*Jour. A. M. A.*, Jan. 29, 1927, p. 340).

**RADITHOR.**—"Radithor" is the name of the latest nostrum in which William J. A. Bailey is interested. It is being exploited by means of elaborate booklets and also through what purports to be a book, entitled "Modern Rejuvenation Methods" by one Charles Evans Morris, M.D. Radithor is exploited by the somewhat imposingly named Bailey Radium Laboratories, East Orange, N. J., of which William J. A. Bailey seems to be the chief. Two or three years ago, Bailey was president and one

(Continued on Adv. Page xx)

Reprint from The Laryngoscope—October, 1926



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### MOLT AND STORZ MODIFICATION OF THE TONSIL GUILLOTINE Dr. Wm. F. Molt, Indianapolis

All who use the Sluder method of tonsil enucleation realize that the most satisfactory and complete enucleation can only be had by the use of a blunt bladed instrument. Such an instrument must of necessity have a perfect seating of the blade into the ring end of the guillotine in order to completely detach the connective tissue that holds the tonsil in its bed. Numerous appliances, mechanical dogs and double bladed instruments have been placed on the market to accomplish this purpose, but in my hands none of these have proven satisfactory.

It is most annoying to say the least to attempt to enucleate the tonsil and find that the instrument fails to completely detach it, necessitating that the operator either tear off the remaining portion or cut it with a knife or scissors. Especially is this true when operating under local or gas anesthesia.

To overcome this we devised a flexible or resilient loop suspended on both sides of the fenestrated part, lying concealed and protected in the hollow ring end of the original guillotine. This resilient loop will, when pressure is exerted, adapt itself perfectly to the circumference of the blade, and by its use a complete enucleation can be depended upon.

As it is a mechanical impossibility to make a blade that will fit perfectly into a rigid ring instrument we therefore conceived the idea that a flexible steel loop could be placed into the ring end of the guillotine so that when the blunt blade was driven home by the special thumb dog, an even pressure would be exerted at all points of the blade and a complete enucleation obtained by the use of the thumb pressure alone. A special constructed lever which is a part of the blade itself makes it possible to exert all the pressure necessary with the thumb.

The blade and carrier have been so constructed that this instrument takes up much less space in the mouth than the ordinary guillotine. I have used this guillotine in a large number of tonsillectomies and so have a number of my associates, with perfect results. The instrument is made in two standard sizes, regular and large.

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## TRUTH ABOUT MEDICINES

(Continued from Page 128)

of the incorporators of the "Associated Radium Chemists, Inc.," which put out "Arium Tablets." Bailey also, it appears, was connected with the Thorone Company which sold "Thorone Tablets," claimed to be more radioactive than radium. Later, Bailey was connected with the American Endocrine Laboratories which exploited what was originally called the "Radiendocrinator" and sold first for one thousand dollars and later for one hundred and fifty dollars. (*Jour. A. M. A.*, Jan. 29, 1927, p. 343).

WITH the idea of having the annual sessions of the A. M. A. more practical, the Board of Trustees has arranged for clinics at the Washington session. This innovation will be appreciated by all those who attend the session.

LUMINAL (Barbital) is recommended as a prophylactic as well as curative treatment for cocaine poisoning by the *International Surgical Digest* of November 26th, page 291. If this recommendation is trustworthy, certainly the announcement should be of extreme value to every physician who has occasion to use cocaine as a local anesthetic.

One or two of the military surgeons of our Civil War employed a clinical thermometer. These men probably were looked upon as ultra-scientific and therefore impractical. In 1868, however, Wunderliche's classic work on clinical ther-

metry appeared, and this finally convinced the medical world of the importance of the thermometer in medicine.—Rufus Cole, *Science*, August, 1926.

## BOOK REVIEWS

SOUTH AMERICA—By Franklin H. Martin, C.M.G., M.D., F.A.C.S. In collaboration with William J. Mayo, M.D., Francis P. Corrigan, M.D., and Edward I. Salisbury, M.D. Cloth, Price, \$3.00. Fleming H. Revell Company, 158 Fifth Avenue, New York City.

First edition, published in 1923, has been completely revised, and amplified to include all of the Latin-American countries. Section I. of the book contains a chapter on each of the Latin-American countries, with a full and complete description and many illustrations. Section II. contains a summary report of the relation of the American College of Surgeons to the Latin-American countries. Section III. deals extensively with the Surgeons and Medical Institutions of Latin-America, and is profusely illustrated. Any medical man who contemplates a trip to any of the Latin-American countries will find "South America" invaluable. Section IV. contains a complete summary of facts, historical, geographical, political, social and industrial. In this portion of the book may be found a summary of all information that may be of interest either to the traveler or to the historian. Section V. contains an English-Spanish and English-Portuguese vocabulary which would be most helpful and almost invaluable to any one contemplating a voyage to Latin-America, and both vocabularies are a splendid basis for the study of Spanish or Portuguese. Section VI. contains tables of weights and measures, both the standard and metric systems, and a comparison of the two. Section VII. is a complete index of "South America."

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### ORIGINAL ARTICLES

#### CONSIDERATIONS IN THE MANAGEMENT OF INFECTIONS IN THE GENITO-URINARY TRACT\*

N. K. FORSTER, M.D.  
HAMMOND

When one considers that mortality statistics reveal approximately 100,000 deaths per year in the United States from non-venereal diseases of the genito-urinary system and adnexa<sup>1</sup>, and that if we include venereal diseases the morbidity rate must be enormous, it can be appreciated that there is no subject that can be submitted for discussion here which should arouse greater interest than a consideration of genito-urinary tract infections. Not only do these infections or their results come daily to the notice of the general practitioner, and the specialist as well, but they are met with in children, adults and the aged, and the manner in which they are handled when first seen is often the decided factor in the patient's future health.

In a consideration of such a broad subject it is necessary that much of interest be omitted and many facts of importance dealt with briefly, so that whatever I may have to offer will be in the nature of a rapid glance in review of some of the accepted methods of managing the commoner types of infections met with in the genito-urinary tract.

The types of infection most commonly encountered are those caused by the gonococcus, bacillus coli, staphylococcus and streptococcus, and the bacillus of tuberculosis. The manner in which these organisms reach the genito-urinary tract should be determined whenever possible, for by the elimination of distant foci it is possible in many instances to effect an immediate cure of the genito-urinary lesions, providing they have not become too far advanced.

Direct implantation by contact in sexual intercourse undoubtedly accounts for practically 100 percent of gonococcal infections. Bacillus coli, staphylococcus and streptococcus infections may be introduced directly by implantation through

the use of catheters and instruments, through wounds, either accidental or surgical, and by direct extension from involved neighboring organs. Implantation through neglect of ordinary cleanliness may be a factor in women and especially in female children. But by far the majority of infections of this type are brought to the genito-urinary tract from distant foci through the blood stream. For the colon type of infections the gastro-intestinal tract furnishes the focus in the majority of cases. The organism gaining its access to the genito-urinary tract from some part of the intestinal canal which, from some cause, has had its mucosal barrier damaged so as to allow the passage of the microbe into the blood. The organism may reach the kidney through the blood from any distant focus of infection. A diseased appendix may often be the seat of genito-urinary infection as pointed out by Kreutzman<sup>2</sup>, and infected hemorrhoids, fissures and fistulae are frequently the starting point for the migration of this organism. The lymphatic route should be mentioned as a possible pathway, through the connections between the bowel and the right kidney and ureter, between the rectum and bladder, and between the uterus and bladder in the female, although transmission by this route has never been proven. In the case of streptococci and staphylococci we find these organisms likewise most frequently carried to the urinary tract, from some distant focus. Young<sup>3</sup> has found them in the urine in cases of acute endocarditis. Rosenow<sup>4</sup> and others have produced urogenital infections through the intravenous injections of organisms obtained from dental abscesses, tonsils and sinuses. So that for practical purposes any distant infection produced by staphylococci and streptococci may be considered as potential foci of infection for the urogenital tract. Chief among the offenders are cases of tonsillitis, alveolar abscesses, sinus infections, carbuncles and furuncles, and infected wounds.

With tuberculous infections the focus is practically always removed from the invaded structure, and infections occur through the blood stream and lymphatics from the respiratory and alimentary tract, or from infected glands or

\*Presented before the Section on Surgery at the annual meeting of the Indiana State Medical Association, West Baden, Indiana, September 22-24, 1926.



organs elsewhere in the body. It frequently happens that before the urogenital condition is diagnosed that the original focus has been arrested or subsides, and this fact undoubtedly is responsible for earlier reported cases of primary tuberculosis in the genito-urinary tract.

Once the genito-urinary tract is involved, extension of the infection usually occurs in a descending manner, that is in the direction of the secretory stream. Ascending infections, however, frequently take place particularly, although not necessarily, in the presence of obstruction. Consequently in any consideration of a genito-urinary infection it is necessary not only to determine the distant focus, but to ascertain the point of origin in the tract itself if appropriate treatment is to be carried out. It is just as irrational to direct treatment solely toward the relief of cystitis without ascertaining the presence or absence of kidney infection, as it is to expect a cure of gonorrhea in the female by the removal of infected tubes alone. And little can be gained in the treatment of urinary infections if a distant focus is allowed to persist in furnishing bacteria to the infected tract.

Genito-urinary infections are, in general, manifested by inflammatory disorders of the tract, and pyuria is the common objective symptom. It is essential for accurate diagnosis that the cause and the source of pyuria be traced. In the female pyuria is almost always of urinary tract origin except when a genital tract fistula exists. In the male pyuria may originate in any part of the whole genito-urinary tract. For purposes of diagnosis various procedures are available. Besides the history and physical examination, which of themselves are often sufficient to indicate the nature and extent of the condition, we have the urethroscope, cystoscope, ureteral catheter, urine examination both by smears and cultures, the pyelogram and animal inoculation. By one or all of these aids it is possible to determine the location and extent of the anatomical lesions and the character of the infecting agents.

In gonococcal infections reliance is placed chiefly on information obtainable from smears of discharge or expressed secretions. In this connection a routine Gram stain should be used in place of the ordinary methylene blue stain so commonly employed, as many of the cocci group resemble the gonococcus in morphology. The gonococcus is easily demonstrated from smears and centrifuged urine when the case is acute; but it may be difficult to follow it in its hiding places in the folds of the posterior urethra, and prostate and seminal vesicles.

In bacillus coli infections, identification of the organism can readily be confirmed by the formation of acid and gas in dextrose and lactose cultures.

Staphylococci and streptococci are, as a rule, sufficiently typical in their morphological character-

istics as to be readily identified by Gram stained smears. Where doubt is injected further confirmation is obtainable through their behavior in growth on various media.

The greatest diagnostic difficulties are met with in tuberculous infections. In early renal tuberculosis the clinical symptoms are not characteristic, or rather they are not pathognomonic. The first symptoms are those of cystitis, and as a rule pyuria in a bacteria free, acid urine plus frequency denotes kidney tuberculosis if supported by other clinical data. Repeated examination of urine for the tubercle bacillus and guinea pig inoculations, together with physical examination for the determination of the presence of tuberculosis elsewhere in the body constitutes the routine. Thomas<sup>5</sup> found that the tubercle bacillus was obtained from smears of bladder urine in seventy-seven percent of proved renal tuberculosis cases, and ninety-three percent of carefully examined ureteral catheterized specimens. Caulk<sup>6</sup> thinks that only three percent of guinea pig inoculations are negative in positive renal tuberculosis. The objection to animal inoculation is the prolonged time necessary to secure results, but the objection is easily met in that a positive diagnosis can usually be made and the necessity for some radical measure definitely proven.

In considering the management of the infection once the diagnosis of its nature and extent has been made, it is essential that emphasis be laid upon the importance of eradication of any distant focus which can be demonstrated, in order that treatment may prove really effective. Nor is it necessary that much time should be lost in doing this. In most cases treatment of the focus and of the urogenital tract lesions can go hand in hand. Infected tonsils and abscessed teeth should be removed. Adequate drainage of infected sinuses should be established. Lesions in the gastrointestinal tract should receive appropriate treatment. In tuberculosis it goes without saying that strict attention must be given to the pulmonary lesions in the hope of arrest or cure of this condition, not however waiting for this to occur before instituting radical methods in caring for the urogenital infection.

In gonococcal infections the disease is usually localized in the genito-urinary tract, and involvement of the kidney, ureter, and bladder is rare, so that consideration is confined to its care in the urethra, prostate, seminal vesicles and epididymis in the male, and the urethra, vagina, cervix and Fallopian tubes in the female.

In spite of vast amounts of time, labor and money spent in campaigns to "educate the public," and the establishment throughout the country of government and civic clinics for the free treatment of the infected, gonorrhea today is as prolific as it ever was. Efforts to depict the horrors of its ravages would seem to have been unavailing in checking its spread, though undoubtedly they have

led a greater number to seek relief. Until such a time as a specific remedy is secured it appears absurd to attempt to check its spread by the promulgation of rules and regulations which are rarely observed and never effective. The very nature of its mode of transmission precludes regulation, and efforts directed toward more effective methods of treatment and the discovery of some specific remedy offer the greatest hope in checking the spread of this disease.

To attempt to enumerate the measures instituted against gonococcal infections would be entirely too time consuming. The old method of administering some concoction by mouth and waiting for nature to do the work has long since been abandoned, and it is realized that local measures must be stressed if the disease is to be eradicated and complications prevented. Local measures in gonorrhea do not preclude the use of genito-urinary tract antiseptics, or internal medication for the relief of symptoms, but in the final analysis the cure of the condition will depend largely on how well local measures have been employed.

For the acute cases of gonorrhea, seen early and limited to the anterior urethra, attempts have been made to abort the condition by the use of various local antiseptics. I think it is now generally realized that it is impossible to abort any gonorrheal infection, whether it be the first infection, or a subsequent attack. Efforts must then be directed to the cure of the condition. Locally the measures used are innumerable and the success in treatment is entirely individual. Apparently it makes little difference what antiseptic is used, for all of them appear to be employed successfully in individual cases. The drugs to employ are the ones with which the practitioner has had the best results. The important point to remember, however, is that the acute cases respond much more readily to the use of very weak solutions employed frequently, and the practice of gentleness in these cases cannot be too strongly emphasized. Personally I have found a two percent suspension of silver iodide superior to any for injection into the anterior urethra. A bland alkaline mixture by mouth has been found very efficacious in conjunction with local measures in relieving symptoms, and aiding in the cure. Attention should, of course, be given to general hygienic and dietetic measures.

It has been variously estimated that from fifty to ninety percent of cases of gonorrhea involve the posterior urethra, and this means the seminal vesicles and prostate in addition. In the acute stages the treatment should be directed to symptomatic relief, leaving local measures until the acute stage has subsided. Chronic cases of gonorrhea are, with few exceptions, due to the localization of the organism in the prostate and seminal vesicles; the principal exception being that of infected glands of Littre and strictures in the anterior urethra. In chronic cases the management

will depend upon an accurate diagnosis of the structures involved, and appropriate measures must then be directed to the seat of the lesion. It is in these cases that prostatic massage and seminal vesicle expression is largely employed, followed by deep instillations of the stronger silver salts.

The number of chronic gonorrheics, in their travels from one physician to another seeking relief, who have never had a rectal examination much less routine prostatic and seminal vesicle expression, is noteworthy. And yet little progress can be made in the cure of these cases unless systematic treatment is directed to these organs. The diagnosis of infected Littre's glands is one frequently overlooked, and treatment directed to these foci will frequently clear up many obstinate cases.

One of the most distressing complications of gonorrhea, and a too frequent one, is acute epididymitis. Here a large list of unsatisfactory methods of handling are available, and the treatment again should be the one with which the physician has had the best results. In our hands it has been noted that if the case is seen when tenderness along the vas is experienced and before the epididymis has begun to swell, that the impending epididymitis may be aborted, in many cases, by the intravenous use of sodium iodide. When the case is fully developed we have employed a polyvalent gonococcus vaccine, given intravenously. The resultant reaction of chilling and a temperature to around 104 appears to be extremely effective in bringing about quick relief of symptoms, and a rapid resolution of the swelling. This method has been employed in more than 3,000 cases at Cook County Hospital in Chicago, with no fatalities and few untoward effects.

Treatment by diathermy is reported as having been successfully used by many, particularly Corbus and O'Connor<sup>7</sup>. Some reports of negative results are available. In its employment in our hands, in a limited number of cases, despite careful attention to recommended technique, it has invariably made the condition worse and aggravated the symptoms. It appears logical that this should be so, since the value of diathermy in the presence of confined pus is negative. Surgical intervention should be reserved for cases showing definite abscess formation.

Apart from the treatment of the focus of infection, where this can be demonstrated, the treatment of bacillus coli, staphylococcus and streptococcus infections is through the employment of suitable internal medication either by mouth or intravenously, and external measures such as irrigations, instillations and injections of bactericidal remedies.

We all know how great the desire is to obtain some stable chemical urinary disinfectant which is bactericidal and not irritating to the tract in



therapeutic dosage. The number of drugs for which such qualities have been claimed is legion, but time will only permit me to mention the two most important urinary antiseptics brought out in recent years, viz. mercurochrome 220 soluble, and hexyl-resorcinol.

Before referring in detail to these I would like to say that Thompson-Walker<sup>8</sup> points out that the great objection to many medicamental antiseptics is that laboratory experimental conditions cannot be reproduced in the human body. The amount of drug excreted through the kidneys, the acidity of the urine, the pathology of the urinary tract mucosa, etc., are factors that cannot be ignored.

Veader Leonard<sup>9</sup>, of Baltimore, is the strongest advocate of the value of hexyl-resorcinol. He thinks that this drug meets the requirements of a urinary disinfectant; that it passes through the kidney harmlessly, and imparts a bactericidal quality to the urine. He claims that oral administrations of the drug are effective against the staphylococcus, streptococcus and pyocyanus microbes, but especially against the bacillus coli. He says that doses of from 0.25 to 0.5 gm. of the drug given three times daily, secretes urine which kills the germs. D. A. Brown<sup>10</sup>, of Madison, Wisconsin, reports that in practically every one of sixty-three cases his experience leads him to support Leonard's claims in regard to hexyl-resorcinol. Henline<sup>11</sup> states that in fifty-six rigidly observed protracted urinary infections, in which hexyl-resorcinol was tested out, all the cultures of urine except two became sterile in an average of 63.5 days; less in the case of colon bacillus infections. But in fifteen cases of gonorrheal infections none could be noted as improved by the drug.

Other opinions, however, have been expressed which do not accord with the favorable results just mentioned. The chief objection to its use are the prolonged treatment necessary for results, the frequent gastro-intestinal disturbances manifested with its use, and its cost. However, it appears to be a valuable contribution and should be employed in instances not responding promptly to the usual methods. In the case of bacillus coli infections Leonard<sup>9</sup> recommends that the total number of bacteria be reduced by the usual local treatments to a point which will afford the drug an opportunity to complete the disinfection. Hexyl-resorcinol should be used in large doses, and the forcing of fluids and use of alkalis in conjunction with it are contraindicated.

As regards mercurochrome 220 soluble, as we all know it has been brought out and strongly favored as a general systemic disinfectant by Young of the Johns Hopkins Hospital. Young<sup>12</sup> has reported a series of seventy-six cases of genito-urinary disease, in which complete sterilization of acute and chronic infections of the urinary tract was obtained by intravenous injections of mercurochrome in doses varying from two to five mgm.

per kilogram of body weight. These included four cases of peri-nephritic infection and twenty-six of pyelonephritis. Young says that chronic cystitis, prostatitis and vesiculitis are not always cured but there are often brilliant results. Young has not hesitated to give mercurochrome even when albumen, casts, pus cells and bacteria have been present in large numbers in the urine, because experience has shown that the kidney was not damaged by the drug.

Braasch and Bumpus<sup>13</sup> found mercurochrome efficacious in acute and subacute infections of the urinary tract. But in chronic infections they did not find the drug of great therapeutic value. They think that the great objection to its intravenous use is its toxic action, and severe reactions are common. On this account they consider that mercurochrome should only be used intravenously as an emergency method.

In 525 cases treated completely by Redewill and Potter<sup>14</sup> with mercurochrome alone they found only twenty-two were not improved. Of the 474 others only twenty-four or five percent were cured by mercurochrome alone.

Hill and Colston<sup>15</sup> made an experimental investigation of the bacteriostatic action of mercurochrome in the blood stream. They found that heavy doses may damage the tubular epithelium of the kidney. In 125 patients tested 104 showed marked bacteriostatic effect; in twelve the effect was questionable; and nine were intolerant to the drug. These writers used one percent mercurochrome intravenously, ten to fifteen cc. being injected at one time. They found that expressed prostatic and seminal fluid was decidedly bacteriostatic. Besides being excreted by the kidneys it is claimed that the drug is excreted by the prostate, seminal vesicles and other glands of the genito-urinary tract and that it comes into direct contact with inflamed areas in the tract.

This medicament should be administered every forty-eight hours and is suitable for ambulatory patients. In dosage of seven mg. and up per kilogram of body weight symptoms of mercurial irritation of the secretory organs may be exhibited. It is claimed for mercurochrome that it is also an intestinal antiseptic. Neither mercurochrome nor any other irritating antiseptic, should be employed in cases of damaged kidney, and permanent results from such drugs cannot be expected so long as foci of infection remain intact in any part of the body.

Acid sodium phosphate and hexamethylenamine are of great value in infections of this type. Alkalinization is frequently used with success. However, it appears that the employment of these measures meets with greater success if they are alternated at intervals, thus changing the reaction of the urine.

Lavage of the bladder or of the kidney pelvis is an accessory procedure in localized infections,

the value of which has been stressed by Thompson-Walker<sup>8</sup> and others. This procedure should be followed in any case not responding readily to internal treatment, or in conjunction with it.

It should be emphasized that careful attention to the diagnosis of associated pathology along the urinary tract is essential to cure of the infection. This includes the various forms of obstruction resulting from ptosis, kinks, strictures, stones, enlarged prostate, contracted vesical neck, etc. Unless these conditions are successfully treated the cure of infection is not likely.

Where internal measures plus local treatment are essential in gonococcal, bacillus coli, staphylococcus and streptococcus infections of the genito-urinary tract, they are of practically no value in tuberculous infections. For kidney infections of this type, if unilateral, a nephrectomy is called for in the early stages, and in the majority of cases, where the tuberculous infection is strictly confined to one kidney, this surgical procedure will cure the urinary tract tuberculosis; and the focus, if pulmonary, can be treated with the possibility of arrest or cure. But if the infection be permitted to progress without such radical treatment it will undoubtedly have a fatal ending within a short time. Hence the necessity for early diagnosis both of the condition and the extent of the lesion. In the epididymis and seminal vesicle infections, operative measures should be resorted to early, as they offer the only satisfactory means of handling the condition.

Beyond these measures the essential treatment is that directed toward the pulmonary focus, and there is little necessity for emphasizing that this should be thorough.

I am well aware that there are numerous aspects of gentio-urinary infections upon which I have not touched, but in skirting the fringe of this broad subject I am hopeful that the review of a few of the essential points has not been unprofitable.

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#### DISCUSSION

WILLIAM E. TINNEY (Indianapolis): For many years the medical profession has known that the incident of venereal disease in this country is very high but it took the Conscription Act and compulsory medical examination by the draft boards to bring out the fact that perhaps one man in every five has a venereal history. It was my lot in the army to be assigned to a venereal camp and one month we had 3,800 venereals in the camp, the majority of whom had received their infection prior to entering the army. I do not believe that all the time, energy and money spent by the government in educating the public to the venereal disease problem has been lost. It is true that the warning has fallen on deaf ears in many instances but I have talked to a large number of young men, many of them college men, and they have a wholesome fear of venereal diseases. Personally I am in favor of teaching prophylaxis in spite of the stand taken by some men that this leads to immorality.

The subject of focal infection has received intensive study by the profession for several years past and its importance in its relation to disease of distant organs and tissue is becoming much better realized and understood. Just a few weeks ago I was called to see a man who had been sick for several weeks. His complaint was chills and fever with urinary frequency and dysuria, the urine was filled with pus, blood, albumen and bacteria. A careful history showed that some weeks before the man had had a painful ear. He went to his doctor, who did a paracentesis, draining out a lot of pus and in a few days the patient was back to work feeling very much improved. Some weeks later he had a sudden chill followed by high temperature and urinary symptoms before mentioned. The doctor immediately put the patient on urinary antiseptic and the accepted diet and hygienic care but the patient made no progress and it was about this time that I was called to see him. A careful examination showed pus still draining from the ear that had been punctured weeks before. X-ray examination showed mastoid trouble and an operation was performed and this focus of infection was eliminated and the urinary symptoms immediately began to subside. The patient made an uneventful recovery.

In obtaining specimens of urine for examination, catheterized specimens are much more reliable. This is especially true in specimens from the female. Pus from an old leukorrhea or endometritis is often found in quantities in voided urine.

There is hardly a month goes by but what one receives the announcement (with yards and yards of testimonials) of a new specific for the cure of acute gonorrheal urethritis. So far in our hands the end results have been much better, complications less frequent and the patient more comfortable with the use of the old reliable organic silver



preparations rather than the use of some of the newer and more irritating antiseptics.

In treatment of acute gonorrheal epididymitis intra-muscular injections of milk proteids has been very helpful and seems to start resolution and hasten the process of repair.

Hexyl-resorcinol has given good results in some of our cases and no demonstrable results in others. In those cases that responded to the drug the improvement was very marked. The drug is certainly a valuable addition to our armamentariums.

In treating cases of pyelitis if they do not respond to internal medication and there is no evidence of obstruction we like to lavage the kidney pelvises with large quantities of silver-nitrate solution using a two-way ureteral catheter.

W. W. HEWINS (Evansville): I wish to stress one point Dr. Forster made, and that is drainage. I believe that without active drainage in the urinary tract we will not get a cure. How many cases of tonsillitis have we seen, or apical abscesses or mastoiditis with no infection of the urinary tract? Why does the other one or two become infected? I believe it is because of faulty drainage of the urinary tract. How many cases of pyelitis have we seen that have resisted all manner of treatment and have done well with simple dilatation of the ureter? How many cases of renal colic have we seen recur following surgical removal because there was not drainage sufficient to prevent the stones from reforming? How many cases of gonorrhea have we seen become posterior because the patient did not get free drainage caused by a pinpoint meatus? In our experience, and we have been seeing these cases before operation and if there is an operation we have been trying to keep them under observation. I believe we are getting very much better results.

In regard to bilateral renal tuberculosis being rapidly fatal, I am going to disagree. We have six cases, I will not say they are cured; I believe they are. Two of them are physicians and bacilli were discharged from both kidneys together with red blood cells and pus at least three times in each case. I believe these physicians are well; their urinalyses are perfectly clear, with only occasionally a little albumin, so I do not believe that bilateral renal tuberculosis is always rapidly fatal.

W. S. EHRICH (Evansville): A few years ago, before the American Urological Association, I made the statement that in the treatment of pyelitis it did not make a bit of difference what antiseptic we injected into the ureters if sufficiently large catheters were used. It was only necessary to give the ureter free drainage and allow the kidney to empty itself to cure the condition.

The most important thing brought out by Dr. Forster in his paper was concerning the treatment of gonorrhoea with a weak solution. I believe that patient would be much better off being put to bed with internal medication than to be sub-

jected to the traumatism of a strong solution. The whole proposition is that you have a considerable amount of tissue reaction and a strong solution increases this reaction. Since I have used very weak injections my results in gonorrhoea have been very much better.

As far as infections of the upper urinary tract are concerned I am getting to believe that they are all secondary to some other focus—a primary focus at a distant point.

In the treatment of urinary infection I never use the same drug any length of time. I believe that the germ will establish a tolerance for a drug just the same as a human being will establish a tolerance for a drug, and therefore the rotation to get the best effect.

C. J. ROTHCHILD (Fort Wayne): There is one type Dr. Forster has not mentioned in his paper that I have had experience with and that is the type of urethral discharge with a very sharp, clearcut history of constipation and recurrent discharge and an acute prostatitis. According to the history of these patients when the constipation has been relieved, the discharge ceases. They come to you not so much because of the discharge, but to get some kind of relief from their recurrent constipation. After correction of their diet they have no further trouble. This type of trouble was pointed out some years ago by Frank of Berlin, as being due to a diapedesis of the colon bacillus into the prostate. Both of the cases I have seen had pure culture of colon bacillus and both denied venereal infection of any kind.

A. S. JAEGER (Indianapolis): The subject being so large, it is excusable that Dr. Forster could not enter deeply into each phase of it. This discussion should not end, however, without some one enlarging upon the female side of the question.

Women are just as deeply interested in these infections as are men, and I am pleased to note Dr. Forster's conservative stand in speaking of the various conditions of the female genito-urinary system; especially that he is not arbitrary on the point that practically all infections of this tract, in male or female, are due to venereal infections.

I am not going to bore you again with my views on venereal disease in women, for most of you here present have heard them before. A woman may have a pelvic infection which is not due to gonorrhea, and what is more, she frequently does.

In my experience, and I feel I have a right to voice an opinion based on this experience, I find that gonorrhea is not so commonly the cause of pelvic diseases in women as many believe. Much more frequently if the history is thoroughly digested, and sufficient interest is taken in working out the primary cause of infection, it will be found that the disease of the pelvis may be readily correlated with some past or present focus of infection elsewhere; the gonorrhea, if present, being

coincidental. For instance, you may find that especially pelvic disease, though at times also diseases of the ureters and kidneys, may be traceable to a long anti-dated mumps or some other exanthemata of childhood.

Women in later life may get bladder or adnexal pathology, the smoldering results of some infection they suffered from years before.

In my own experience, one attack of acute gonorrhea of the lower genital tract of the female does not usually cause chronic nor yet acute pelvic inflammatory disease. The most common causative factors are the ordinary mixed infections and colon bacillus infection; and to a much lesser extent the peculiar infection due to the micrococcus of Bumm. The clinical manifestation being on the order of an aggravated acute gonorrhea, and the coccus under the microscope is also somewhat similar in its general appearance and staining qualities to the Neisserian coccus but larger. This infection does not yield to the ordinary treatment given successfully in gonococcus infection, but does yield readily to autogenous vaccine.

Again many chronic genito-urinary conditions seen in the female, especially pelvic disease, may be traceable to insidious or attenuated non-specific microbic infections of the puerperium; so chronic from the beginning that they do not keep the woman in bed longer than the usual expected time; and it may be many months before the accumulated inflammatory reaction is sufficiently pronounced to cause the woman appreciable discomfort.

If examinations at stated intervals for at least a year following confinement were the rule with many as it is now the exception, I truly believe that conditions would be discovered, which, corrected in time, would lower the percentage of diseases of the urinary and genital tract of women.

#### DIAPHRAGMATIC HERNIA, WITH REPORT OF CASE\*

GEO. T. JOHNSON, M.D.  
TERRE HAUTE

Diaphragmatic hernia is a rare condition, although it is probable that occasional cases go undetected because their true nature is not even suspected. Formerly this variety of hernia was almost exclusively a post-mortem finding, except in the presence of perforating wounds involving the diaphragm, or in cases of obstruction when the true nature would be discovered at operation. In recent years with the aid of the x-ray these hernias are being diagnosed with increasing frequency before operation. The following case is reported because it is quite unusual.

Case No. 31511, Union Hospital of Terre Haute. A robust young fellow of eighteen was one of two workmen pinned beneath a box car which was being repaired, when it slipped from

its jacks, October 29, 1925. His companion was found dead and he was apparently lifeless when rescued, but in a few moments showed signs of reviving. When seen a few hours later his face and neck were swollen and discolored, his body was cold, his pulse was weak and irregular and his respirations were very shallow. The heart dullness appeared to be on the right side of the chest with tympany over the normal area of heart dullness. An x-ray taken at this time failed to show any fractured ribs, but the diaphragm seemed to bulge up to about the third interspace on the left side, as though there might be paralysis or even-contraction of the diaphragm, although clinically rupture of the diaphragm was suspected. He was treated for shock and given morphine freely, but he remained in a desperate condition for several days. There were no symptoms referable to the gastro-intestinal tract. After his general condition improved it was found that he had paralysis

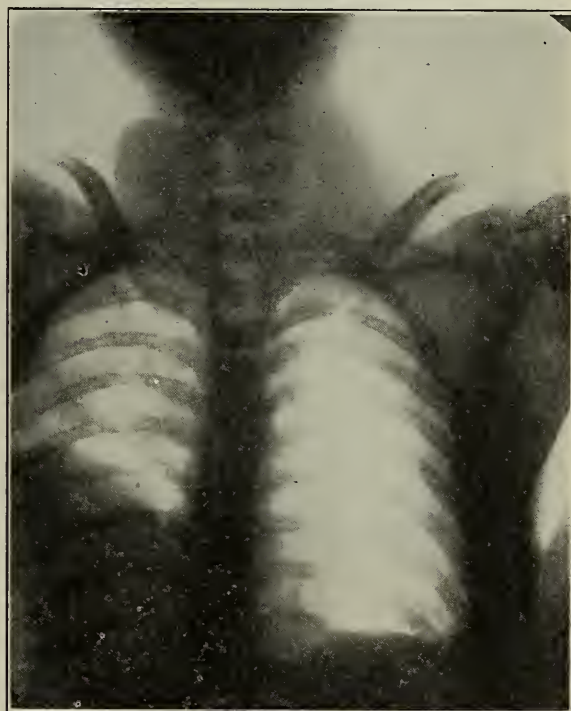


Fig. 1. Radiographic appearance of chest two hours after injury.

of the right arm and of both legs. X-ray examination of the lumbar spine at this time revealed a crushing fracture of the body of the fourth lumbar vertebra and a fracture of the transverse process. His face and neck became more swollen so that he presented the appearance of a severe case of mumps with the addition of a deep bluish discoloration of the skin over this area characteristic of traumatic asphyxia.

On November 14th, examination of the esophagus and stomach under the fluoroscope revealed the esophagus running down to about the usual location of the cardiac orifice and emptying into a cavity which ran up along the spine on the left, the upper edge of which was at the sixth

\*Presented before the Section on Surgery of the Indiana State Medical Association at the West Baden Session, September, 1926.



dorsal vertebra. This cavity had the shape of a pear and retained about sixteen ounces of the barium meal. Along the outer edge of this shadow there appeared to be bowel gas running up parallel with the pear shaped body. There was then no doubt about a rupture of the diaphragm with the entire stomach and a portion of the bowel pulled through the opening.

On account of the fractured spine he was kept quiet in bed for more than two months. During this time he had absolutely no gastro-intestinal symptoms, although he steadily lost weight while eating more than the average bed patient. He gradually regained the use of his right arm during this period.

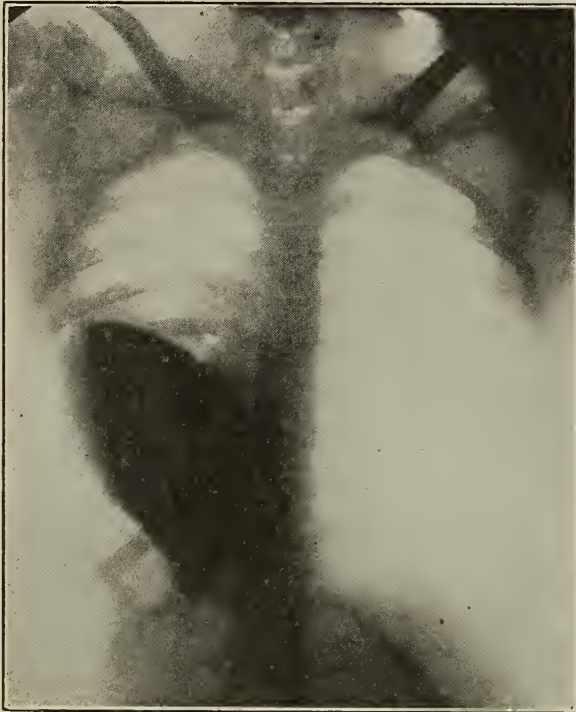


Fig. II. Stomach in thoracic cavity revealed by barium meal two weeks after injury.

On January 7th he was re-examined under the fluoroscope. No shadow of the diaphragm was apparent on the left side. When the barium meal was given the esophagus was seen to dilate before reaching the cardiac orifice. After entering the stomach the barium turned directly back on itself, showing the stomach in the pleural cavity. After a little time it was seen to run across the abdomen through the duodenum. A barium enema given at this time showed the colon filling very rapidly with the splenic flexure much higher than the upper border of the stomach and on a level with the second interspace. The colon then turned on itself, coming back down into the abdomen in the usual position. In spite of the position of these abdominal viscera in the thorax the patient had a good appetite and a daily bowel movement. The most noticeable abnormalities were the displacement of the heart, a decided tympany over the

usual area of heart dullness and a very sunken abdomen. The pulse remained rather rapid and of poor volume. A severe bed sore had developed over the sacrum, but it was about healed by this time and as his general condition was as good as one could expect operation was decided on.

Operation January 18, 1926. Ether anesthesia. A long incision was made in the eighth interspace on the left side and the ribs were widely retracted with a rib-spreader. From appearances one would imagine that he had opened the abdominal cavity. Immediately beneath the chest wall was the omentum and beneath that the stomach, colon, spleen and small intestine were found. Only a narrow shelf of diaphragm was found anteriorly and aside from this the communication between the chest and abdomen on this side appeared to be uninterrupted. An attempt was now made to replace the abdominal viscera by shoving them down and packing above. No adhesions were encountered but this procedure seemed entirely futile, the viscera slipping back as rapidly in one place as they were replaced in another. It seemed probable that this was a congenital anomaly of the diaphragm and as there appeared to be no likelihood of strangulation developing on account of the wide communication present, I had about decided to terminate the operation by closing the chest wall and so withdrew all of the packing. However, wishing to be thoroughly satisfied about the posterior portion of the diaphragm the ribs were spread more widely and a hand inserted for exploration. At each inspiration a large amount of air rushed into the pleural cavity and the posterior portion of the diaphragm was now found retracted into a thick narrow shelf, lying almost flat against the posterior body wall. With the atmospheric pressure bearing down upon them, the viscera no longer slipped back so irresistibly when pushed down into the abdomen and they were now replaced without difficulty. They were retained by packing the upper abdomen and with the admirable exposure obtained it was a simple matter to bring the tough edges of the diaphragm together with interrupted mattress sutures, in spite of the fact that the anterior and posterior halves had been so widely retracted that they lay almost flat against the body wall. Notwithstanding the fact that the left pleural cavity was wide open and the left lung completely collapsed, respiration was not embarrassed at any time. After the mattress sutures had been placed a running suture was inserted to insure accurate coaptation and the pleural cavity was closed. The lungs were inflated with oxygen before the final sutures were tied in the pleura and the left lung was seen to expand and entirely fill that side of the chest. The operation was then soon completed, having consumed an hour and twenty minutes.

Following operation the patient's condition remained good for about eight hours, after which he developed a severe grade of shock which lasted

nearly thirty-six hours. He then gradually improved and thenceforth gained steadily. An area of shifting dullness developed over the left side of the chest and the x-ray revealed a hydro-pneumothorax. On aspiration a large amount of dark blood-stained fluid was obtained. Aside from this effusion the recovery was uneventful.

X-ray examination four weeks after the operation showed the stomach filled with the barium meal in the normal position. A barium enema showed the colon filled in the normal position with the exception of the splenic flexure which was considerably lower than normal. X-ray examination of the chest several months later showed the left lung well aerated with only the shadow of thickened pleura and possibly a small amount of fluid persisting. The paraplegia gradually improved so that he was able to walk, but a foot drop made the gait unsteady. Recently I removed the laminae of the fourth and fifth lumbar vertebra hoping eventually to secure the return of use of the flexors of the feet.

A very exhaustive survey of operations on diaphragmatic hernia was reported by Hedbloom at the meeting of the A. M. A. in May, 1925, representing all reported cases (378 in number) in which operations were performed, found in the available literature up to 1924. Of these only six had all the organs herniated which were present in this case.

The main symptoms noted in the reported cases in the order of their frequency were vomiting, pain, dyspnea, symptoms of obstruction and constipation. A few were like this case in being practically free from symptoms.

The physical signs most frequently noted were tympany of the lower thorax, heart displacement, dullness in lower thorax and abnormal sounds in the chest due to the presence of abdominal viscera. In twelve of 100 cases the physical findings were reported as normal. The most important aid in diagnosis is the x-ray, but a simple chest picture may not be distinctive enough to make one even suspect the condition. Examination with the barium meal and enema will usually clear up the diagnosis as the stomach is generally herniated and the colon and intestines frequently involved. If the omentum or other solid organ is the only one herniated the x-ray may be of no assistance in diagnosis.

Fifteen percent of the 251 civilian cases reported were congenital and in fifty-eight percent of all 378 cases symptoms had lasted for more than a year before operation. Of the total exactly one-third were operated for obstruction with a mortality of fifty-three percent, while the two-thirds without obstruction gave a mortality rate of twenty-four percent.

The methods of approach have been by laparotomy, by thoracotomy and by a combined operation. In the cases without obstruction thoracotomy has had a lower mortality and a much

higher proportion of complete closures as compared to laparotomy. In the past thoracotomy was largely feared on account of the dangers of open pneumothorax, but as Hedbloom points out, even with laparotomy an open pneumothorax is usually produced by the reduction of the hernia and the presence of the abdominal viscera in the thorax for some time probably results in the establishment of compensatory changes which make an open pneumothorax harmless. In this case the open pneumothorax seemed entirely harmless and the atmospheric pressure was of the utmost assistance in reducing the hernia and keeping it reduced, converting what seemed to be an impossible operation into a relatively simple procedure.



Fig. III. Stomach and colon in thoracic cavity revealed by barium meal and barium enema.

Furthermore the shape and position of the diaphragm make the exposure by thoracotomy ideal, whereas working on the concave surface through an abdominal incision is difficult at best.

Considerable controversy has occurred in recent years over the effects of open pneumothorax. The experience of the World war demonstrated that robust young men could withstand an opening in the chest wall of a size that previously would have been considered invariably fatal, while cases of acute streptococcus empyema would frequently not even stand open drainage. Duval takes the extreme view that a large opening of one side of the chest with collapse of that lung is less dangerous than a small opening. Graham, who has somewhat modified his former views, holds that it is entirely a question of the vital capacity of the patient and the presence or absence of adhesions which resist the action of atmospheric pressure



which will determine how large an opening will be tolerated.

The freedom from respiratory embarrassment and the ideal exposure in this case, in which the abdominal viscera had kept the left lung collapsed prior to operation led me to believe that the preliminary use of artificial pneumothorax would probably be of signal assistance in thoracic operations. This was already being employed by Arce of Buenos Aires, who has recently described his technique of thoracotomy with free pleura in which he creates an artificial pneumothorax in three sittings on alternate days preceding operation. When the advantages of this technique are

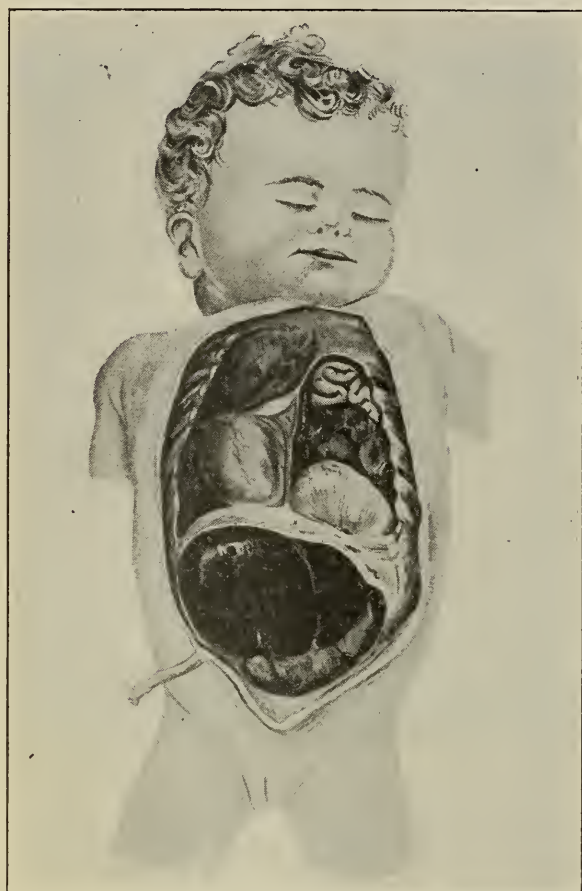


Fig. IV. Congenital defect of diaphragm with viscera occupying practically the same position as in author's case.

fully realized it will undoubtedly come into general use. Certainly where the lung is already collapsed, little or no trouble is to be expected from open pneumothorax.

In any case, however, one should be prepared to combat serious embarrassment of respiration should it occur, and Graham states that all that is necessary is an ordinary gas-oxygen apparatus with a tight-fitting mask as suggested by Bunnell in 1910. By this means periodic inflation of the lungs simulating natural respiration can be instituted. In this case the lung which had been collapsed for two months was thus readily inflated.

#### CONCLUSIONS

The experience with this case and the literature

on the subject lead to the following conclusions:

1. A diaphragmatic hernia should be suspected in any case where the diaphragm may have been injured, either by a perforating wound or by a crushing force. Obscure symptoms referable to the abdomen or chest should lead one to consider the possibility of a diaphragmatic hernia.

2. Where diaphragmatic hernia is suspected, examination by the x-ray with a barium meal and barium enema will, in most cases, give most definite information.

3. Thoracotomy is ordinarily the operation of choice in diaphragmatic hernia.

4. Open pneumothorax is of considerable assistance in the reduction of diaphragmatic hernia, because without it the tug produced by respiration is enormous, but one should be prepared to combat possible embarrassment of respiration from this source.

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#### DISCUSSION

M. C. SEXTON (Rushville): This paper of Dr. Johnson describing his case of diaphragmatic hernia describes a very unusual case. This man, it was noted, had a diaphragmatic hernia with almost complete evisceration into the pleural cavity. Not only this, but he had a hydropneumothorax, paraplegia and fracture of the spine. Outside of that, there was nothing the matter with him. It seems to me that the recovery in this case was certainly due to excellent judgment as to when to operate and to good surgery.

Diaphragmatic hernia is a condition that you will see very infrequently, once or twice in a lifetime. The one case of diaphragmatic hernia that I have seen I am not very proud of, although there were some excuses in the case. I will proceed to describe it in some detail. This man was a farmer, aged forty-seven. During the hay harvest of July, 1921, he lifted a very heavy load. At that time, previously having been in good health, he felt something give way with severe pain, perspiration and shock. This was relieved by morphine. After a few days the pain subsided. Then followed a period of time during which when he would eat a meal he would become so full and distended that he could hardly breathe, but he had nausea or pain. His doctor taught him the use of the stomach tube. His life from then on for about four months, became a period of great distress, stomach lavage and a minimum relief, a loss of weight of something over fifty pounds, and marked weakness. In this condition, the following December, I saw him in consultation. The man was in extremis from starvation. There was a tympanitic note well up to the third interspace on the left side. The heart was markedly pushed over to the right, but the thing we were particularly interested in was the fact

that there was a man who was starving to death from presumably some duodenal or pyloric obstruction. We were forty miles from an x-ray and we thought it was up to us to give any relief that we could. We made a right rectus incision and opening the abdomen, were somewhat disconcerted to find no stomach, but upon further investigation we found the stomach herniated into the left pleural cavity and a large dilated esophageal opening. The stomach was pulled down without effort. The man's condition on the operation table was bad. We hurriedly did a posterior gastroenterostomy, shortening the gastro-hepatic ligament, closed the abdomen and put the man to bed with a very weak pulse, about 150. He made a good operation recovery. We could not possibly close the opening in the diaphragm. It was entirely inaccessible and the man's condition precluded any operative procedure. His recovery has been entirely uneventful. It is now three years and he is back to his old weight and doing his normal work. We have urged him to have a thoracotomy and closure of the diaphragmatic opening, but he refuses operation. That is our experience with diaphragmatic hernia. It is a rare condition. It is found most frequently as a congenital condition and these babies usually die. It is like any other rare surgical or medical condition.

H. O. SHAFER (Rochester): Dr. Johnson is to be complimented on the way he has handled this case and the way he has worked it out and reported it to us so that we can see the results that have been obtained. The results he has obtained have been wonderful. I have had experience with only one case. That patient was not operated and is now quite well. The patient had some thoracic symptoms because the stomach and part of the duodenum are in the chest. We have advised him to live a normal, easy sort of life and to get by without operation because his stomach, part of the intestinal tract and omentum is occupying the thorax. I think in this case we would fail as we would in an old inguinal hernia where half the contents of the abdomen are down in the sac. We fail in that type of case because the abdominal cavity is not able to retain the contents.

A condition like this that is so rare, as illustrated by the fact that there have been only twenty-one cases in the Mayo Clinic in the last fifteen years, shows that we are certainly liable to miss one of these cases because we have not had enough experience with them to be on our tip-toes regarding them. The case the doctor has had being traumatic, made the case one which was available to the x-ray and made the diagnosis comparatively easy, at the same time the management of that case was certainly difficult and the doctor should be complimented for getting the man on his feet and the abdominal contents back where they belonged after they had occupied the thoracic cavity as long as they had.

BUDD VAN SWERINGEN (Fort Wayne): I have

had two of these cases, one representing the congenital type which may be dismissed with a very few words. It was several years ago. The delivery was accomplished without difficulty but the child refused to breathe. With the parents' consent I opened the abdomen and found the abdominal contents in the thorax. The abdomen was scaphoid. There was nothing to be done.

The other case represented the traumatic type of herniation of the abdominal contents into the thorax and followed an accident in which the man was caught in an elevator that was going up and forcibly doubled up. He sustained a fracture of the ribs and also a fracture of the left wrist in addition. He was under the care of the physician and was only in bed a few days when he came to



Fig. V. Position of stomach and colon one month after operation.

the physician's office for the treatment of his Colles' fracture. He complained of some stomach symptoms following eating, which were thought to be due to dyspepsia. He finally acquired the habit of making some peculiar motion when he swallowed until the bolus got into the stomach. Dyspepsia followed nearly every meal. The symptoms had lasted for several years when I first saw him. The signs were those of pneumothorax on the left side; there was a tympanitic percussion note and metallic tinkling. It was before the day of x-ray and while we suspected that hernia of the diaphragm was the nature of the case, because of the absence of any history of pleurisy or pneumonia, we were unable to be sure of it. Nothing could be done and he lived only a few days. At post mortem we found the stomach adherent to the parietal pleura throughout its entire extent and it could not have been replaced had the patient lived.



I have mentioned these cases before in a similar discussion and I just want to repeat them here because of the fact that this one man lived so long and was so comparatively free from symptoms after such a serious accident.

GEORGE T. JOHNSON (closing): I reported this case because it is very unusual. As I mentioned in the paper, there have been apparently only six cases reported previously in which these same organs herniated. In this particular case the loss of weight appeared to be progressive. The patient was in bed for two months before operation and in spite of the fact that he ate well and did not have any distress whatever, he appeared to lose weight and get thinner and thinner. Of

chest except the collapsed lung and yet he went on breathing very easily.

As mentioned in the paper, in this month's number of *Surgery, Gynecology and Obstetrics*, there is an article in which the author describes his method of creating an artificial pneumothorax previous to operation and has a quiet lung to work on with no embarrassment in respiration. It would seem to me that that is a method which will probably be very generally adopted in the future in thoracic surgery.

#### 'RELATION OF INFECTED NASAL SINUSES TO OPTIC AND ORBITAL DISEASE\*

JOHN F. BARNHILL

INDIANAPOLIS

It is now very generally accepted both by ophthalmologists and rhinologists as a clinical fact, that diseases of the accessory nasal sinuses frequently affect the ocular apparatus secondarily. So patent is the fact at present that the well informed rhinologist seeks for early symptoms of inflammatory disease in the eyes of all sinus patients, while the ophthalmologist is equally solicitous in several types of orbital and ocular disease to ascertain if possible if some focus of infection may not be present in a neighboring para-nasal sinus. For a long time, apparently the visual apparatus was looked upon by the oculist as a field which was pretty thoroughly isolated, and one in which the diseases which affected it arose largely within its own very limited environment.

Rather recently Onodi, wishing to obtain the opinion of ophthalmologists on the relationship of sinus disease to ocular affections, made inquiry of the best known European oculists as to their views on that point. The answers were, almost without exception, that there was doubt as to the existence of an occasional relationship as to cause and effect. They did not regard suppurative or other affections of the accessory nasal sinuses as frequent causes of ocular disease. Stattler thought unilateral optic neuritis and atrophy was more likely a result of inflammation, tumors or hemorrhage at the cerebral end of the optic nerve than from disease in adjoining nasal cells. Axenfelde replied that diseases of the optic nerve were much rarer in the presence of sinus disease than might be expected. He reported having seen one case of empyema of the sphenoid in which there was coincident retinal neuritis. Schmidt-Rimpler expressed the strange view that disease of the optic nerve is the result of an affection of the adipose tissue and that no proof exists that suppuration of the sphenoid can of itself cause an affection of the optic nerve. All seemed to admit that blindness in both eyes in the presence of bilateral suppuration in the sphenoidal cavities might be the

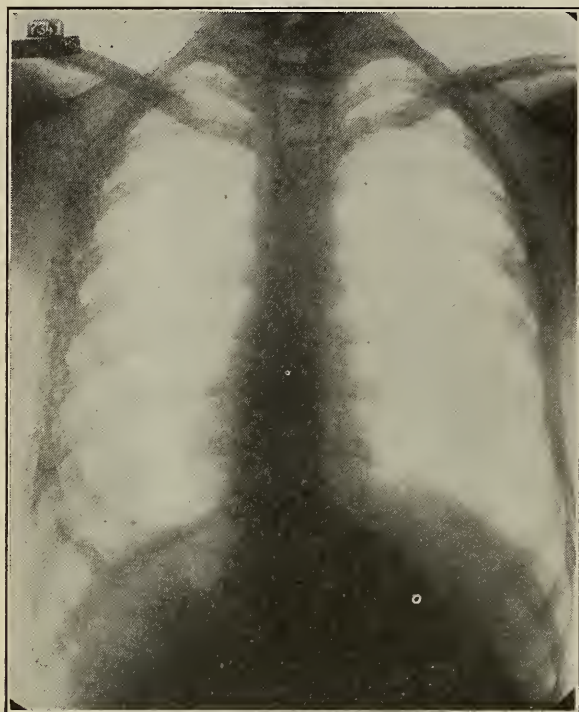


Fig. VI. Appearance of chest five months after operation.

course, the chief danger as in other types of hernia is obstruction and the narrower the opening the more likely obstruction is to develop.

In this man the doctor mentioned as free from symptoms I should think if the opening were very large as it was in my case, the likelihood of obstruction would be very slight and it might be just as well for him to go along without operation.

I was very much surprised during the operation after the chest was wide open to see how easy it was to handle the diaphragm. Before the chest was wide open it was like a laparotomy where the patient was straining all the time and you were working against pressure. That is the case where you have the opening obstructed, whereas with open pneumothorax the atmospheric pressure bears down on the viscera and everything is perfectly quiet. There was nothing in the left side of the

\*From a symposium presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association at the West Baden session, September, 1926.

result of the neighboring suppuration. Onodi concluded from these and other answers that bilateral disturbances of sight usually are caused by intracranial disease, but may occasionally be caused by disease of either the sphenoid or ethmoidal cells.

Meanwhile in America much was written concerning the accessory nasal sinuses as direct causes of certain ocular affections. In 1904 Packard reported several cases of optic neuritis which resulted from sphenoiditis, posterior ethmoiditis and hypertrophy of the turbinates, in which correction of the nasal and sinus affections cured or improved the ocular disease. Weiner, in 1908, reported two cases of complete blindness caused by acute post ethmoidal disease, in each of which vision was restored through sinus treatment in about two weeks.

D. D. Risley in 1904 narrated a case of optic neuritis in which the central field of vision was impaired for three years but which recovered after drainage of the frontal and ethmoidal sinuses. Christian R. Holmes, in 1907, reported a case of complete blindness in the left eye in which there was an unrecognized accompanying sphenoidal suppuration of the same side. The sphenoid sinus was opened and vision returned.

Thos. H. Halsted reported what he regarded as a strange case of sudden blindness in the left eye in a patient who suffered from suppuration of the maxillary, ethmoid and sphenoidal cavities on the *opposite side*. The explanation for this apparently phenomenal occurrence lies in the fact that in some instances one sphenoidal sinus may cross the median line, will lie above its fellow of the opposite side and hence in close proximity to both optic nerves. Since the above early reports of cases connecting optic neuritis with ethmoidal and sphenoidal disease were made, a large number of similar cases have been reported by both rhinologists and oculists. Indeed, the literature of the subject has become too voluminous for individual report. Other papers in this symposium will include all that is necessary of such literature, which as a whole proves the point, we think, conclusively that sinus disease often is a direct and frequent cause of infectious ocular disorders.

Diseases of the eye occurring secondarily to sinus disease, is chiefly or wholly of an inflammatory nature and is caused by the transference of infection from the primary focus in the sinus to a secondary focus in the orbital tissue. If such transfer actually takes place, as at present believed, it becomes of interest to trace the pathways which the infection may follow. The orbital structures, with the exception of the conjunctiva, are sterile and will remain so through life unless invaded by pathogenic bacteria, or their products. The neighboring accessory nasal sinuses, on the contrary, are frequent seats of bacterial invasion and provide favorable septic foci from which

secondary invasion of the orbital structures may take place.

Bacterial invasion from infected sinus to sterile ocular structures may take place (1) through an actual perforation of the intervening tissues, such as results from infection, necrosis and final breakdown of tissue. In this instance orbital infection follows direct contact of the invading flood of infected fluids which finds admission through a more or less open passageway from sinus to orbital tissues.

(2) Ocular infection from a septic focus in the nasal sinus may result from a dehiscence in the intervening osseous wall. Congenital dehiscences occur, though rarely, in the walls of any one of the nasal sinuses. Such dehiscence is most common in the orbital plate of the ethmoid bone. Normally, a congenital dehiscence is filled in and completely closed with strong fibrous tissue, and for this reason no direct infection takes place from sinus to the orbital apparatus. Moreover, it is more than probable that the fibrous structure which closes the dehiscence is fully as resistant to the passage of infectious fluid as is intact bone, for it is well proven that numerous communicating vessels pass through the osseous septal walls of all the sinuses and also between their mucous lining and the periosteal exterior, or covering of the sinus. It is probable, therefore, that the presence of a dehiscence in the wall of a sinus plays but a small part in the causation of ocular infections.

(3.) *Through Venous Channels*—Transports of infection from infected sinus to orbital tissues occurs oftenest through the pathway of the intercommunicating veins. Veins which drain the nasal accessory sinuses communicate freely with venous radicals of the orbit. Infection of orbital structures through these veins takes place chiefly through the extension of a thrombosis in the veins of the affected sinus which extends from the sinus to the orbit. When infection of the orbit takes place under the orbital periosteum, the periosteum may be loosened from the bone and may be greatly elevated without rupture. In such event the orbital contents are displaced but not infected, and orbital cellulitis or phlegmon does not occur. However, the periosteum finally may be ruptured or the thrombosis of the vein may extend through the periosteum to the orbital tissues. In either event the eyeball is displaced by the cellulitis, abscess follows and vision is quickly impaired or destroyed.

(4) *Through the Lymphatics*—After a prolonged and extensive study of the anatomy of the parts Tunis says that he finds no peculiar distribution of lymphatic tissues between the nasal sinuses and optic nerve which would predispose to infection of the nerve from inflammation in the sinus. Others hold similar views and at present it is not thought that the lymph stream plays an



important part in ocular infection from a source in the sinuses.

While close proximity of the posterior group of sinuses to the optic nerve undoubtedly plays an important part in infection of the nerve the fact should not be overlooked that even considerable distance between the focus of infection and the optic nerve is of little importance when the pathway of infection is through the veins. The veins probably are the most frequent route through which invasion takes place, even though the optic nerve and diseased sinus may be rather widely separated.

Recognition of the occurrence of an ocular infection through any of the above pathways should be made at the earliest moment, for if neglected the infection of the optic nerve itself may destroy vision quickly, while infection of the orbital tissues with resulting phlegmon may destroy these structures, including the eyeball, and of course result in total loss of vision in the affected eye. Diagnosis of orbital infection and orbital phlegmon usually is not difficult, but definite determination of the fact that oncoming blindness is a secondary infection of the optic nerve, and is caused by disease of the sphenoid or posterior ethmoidal cells is by no means easy. Brain lesions, especially the presence of tumors at the base in the region of the optic chiasm, will produce ocular symptoms quite similar to those found in disease of the adjacent sinuses. The two causes, intracranial tumors and sinus disease, should be differentiated if possible before the sinuses are attacked by operative measures for the relief of rapid failing of eyesight.

The many reports of rapid restoration of vision, following operative measures on the posterior group of sinuses strongly suggest that every case of failing vision not due to intra-ocular disease should receive a most searching examination for the purpose of determining whether or not the nasal accessory sinuses are the primary seats of the infection. The mere fact that blindness exists is not, however, a positive indication for radical surgery on the sinus which is presumed to be the primary focus of the disease. Before operation is undertaken in any case a very complete examination of the general system, of the eye, and of the central nervous system as well as the sinuses should be made. Complete investigation may reveal the fact that the progressive loss of vision is caused by a cerebral tumor, an enlarged pituitary gland or by the presence of some general disease, in which case, of course, any operative attack on the nasal sinuses would be contraindicated. Should examination of the nose and of the nasal sinus reveal a polypoid and necrotic condition of ethmoidal structures or should pus in any quantity be found in the posterior group of sinuses, operation on these cavities in all cases of progressive or sudden blindness not otherwise accounted for would be indicated. The diagnosis

of sinus disease should, of course, in all cases be confirmed insofar as possible by x-ray examinations. White and others have urged operation on the posterior cells for the cure of this type of blindness even though no visible disease of the sinuses can be determined. These writers state that there is present in the sinuses of this type of disease a hyperplastic sinus affection, the opening of which will restore vision. Under ordinary conditions to open ethmoidal cells which seem normal should not be advocated. In cases of sudden or progressive loss of vision due to optic neuritis, when other causes can be reasonably well eliminated, operations on healthy appearing so-called hyperplastic ethmoiditis probably is justified especially in view of the fact that White and others have reported many cases of restored vision from this mode of treatment.

#### DISCUSSION

KENT J. LEASURE (Indianapolis): This is a very important subject for more reasons than one. In the first place, the optic nerve and contents of the orbit are highly specialized structures and easily affected and the proximity of the sinus to the orbit makes it still more vital.

This subject is not new. The work is new, but this subject was first taken up in 1886, when Ziem reported on the limitations of the field of vision due to nasal accessory sinus infection; then a year later Killian came out with a similar operation; a couple of years Ziem followed by report of seven cases, and finally Sluder brought it up to its present usefulness. John Wright, in his preface to Sluder's book, says that we are not so much concerned with the amount of pathology as with the location. I think that is a very good point. To my mind this whole process of the involvement of the orbit from nasal accessory sinuses is a matter of degree.

You all know that in some cases we find the optic nerve running directly through the sinuses like a telephone wire and in other cases there is a dense bony capsule surrounding the nerve, giving us degrees of involvement. One of the latter cases came under my observation not long ago in which there was no ocular complaint whatever—the complaint was headache. Dr. Beeler took a plate and the posterior ethmoids and sphenoids showed up black, and on opening them they were filled completely with polypoid tissue. The man had no ocular disturbance whatever.

Then you have the degree of whether the disturbance in the orbit is extraocular or intraocular. A case we had not long ago was a little girl who was out late at night in a Ford roadster and in passing another car the car was ditched, and this girl had to lie under the car, with her face in dirty water, until they got the car away. As a result she had a pansinusitis. In a day or two her eye was swollen completely shut. An eye man who looked at it said there was nothing the matter with the eye itself, it was extrinsic. There was a case

that was purely external but which came directly from the sinus involved. You often see eyes swell after a radical maxillary, but this was simply the dirty water that filled the sinus and infected it. The other extreme is a retrobulbar neuritis, which is an internal affair and not so serious.

Another thing is the venous communication between the sinuses and the eye. Dr. Mackenzie taught me whenever you had a bony partition with destructive, polymorphonuclear, purulent, process on one side there would be, due to toxins passing through the emissary veins, a productive, round cell, serous infiltration on the other side. Why not apply that to this condition here? That would be the simplest condition. Then you go from that to a chronic purulent condition, later polyps, later bone destruction and later pus breaking through. There are degrees of involvement possible in all of that. Skillern reports that in about one case out of one hundred you will find pus in the sphenoid sinuses, and that in one case out of ten you find pus under pressure in the sphenoid. You do get some toxemia, but pus under pressure does not often occur. That leaves hyperplastic sphenoiditis and ethmoiditis.

Dr. Wright, in Dr. Sluder's book, also observes that anyone living in a temperate or cold climate will have in time pathologic processes going on in his nose—a bony change going on all the time. Sluder says these eye complications are generally preceded by headache. The diagnosis would probably have to take that into consideration.

I believe this symposium should have been given before the general assembly. I think there should be some teaching in this line. You see noses that have deflected septums, and you tell these people they ought to have a submucous done, and then they go to an internist and he tells them not to have it done. It is something they do not pay any attention to and do not know anything about.

D. O. KEARBY (Indianapolis): I want to commend what Dr. Barnhill said about the arterial and the venous supply. He did not say anything about the lymphatics. It has been my impression that the lymphatics carry infection rather more often than the blood vessels.

I wish that a number of you men would tell what you do in cases in which the eye condition leads one to believe that they have some sinus trouble. I try to make a clinical diagnosis by study of the character of the mucous membrane, the discharges, symptoms and physical pathology seen in the nose and throat. Thereby I come to some sort of a conclusion in my own mind. I use transillumination which helps me a good deal, although sometimes it will fail. Then I send the patient to the roentgenologist to have a picture made. In the suppurative cases where the antrum is full of pus and you can aspirate it, the diagnosis is easy, but where the transilluminator or

film shows a little bit of cloudiness I am not satisfied. After the patient goes to the roentgenologist and I get a reading from him, the report shows that the mucous membrane is somewhat thickened and there is a lack of aeration in the antrum. Now, in that type of case what shall I do? Are you taking these patients and making a window in the nasal wall, or are you irrigating them, or are you doing a Caldwell-Luc operation? I would like to have your opinion. I have been a little bit slow about making a window. I do not know that there is any objection except that the patient does not like it, but I have been satisfying myself that by washing it out a few times the condition clears up. The patients come back and say they feel fine. If that treatment is wrong and a good big opening is the thing to do, I believe we all ought to know about it.

B. D. RAVDIN (Evansville): I have enjoyed this symposium very much, but I regret that not enough eye men have discussed it. The discussion has centered itself entirely from the standpoint of rhinology and radiography.

I think Dr. Barnhill has sounded a wise word of warning in regard to the opening of the accessory sinuses promiscuously on lack of sufficient evidence. When men like White of Boston, who was very radical at one time in opening the accessory sinuses, has become very conservative, I feel that we would do well to follow in his footsteps.

Our personal experience in cases of eye lesions that do not respond to ordinary ocular therapeutic measures, where we suspect intranasal pathology, especially some accessory sinus infection which is not definitely demonstrable, we recently have been following the method suggested by Glick in the November, 1925, number of the *Clinics of North America*, in which he advocates the use of some shrinking solution sprayed into the nose and then follow with some antiseptic solution. It is surprising how many eye cases that do not respond to ordinary ocular therapeutic measures and in which there is no definite general infection, will clear up by employing the above procedure. We see a great many cases of corneal ulcer in industrial work, some of which are very slow in healing. In a great many of these cases by resorting to the above type of intranasal cleansing, the eyes clear up, thus indicating that there must be some definite interrelationship between ocular infections, and various forms of intranasal and accessory sinus pathology.

Dr. Overman mentioned that many cases of infected antrums will clear up by a window resection in the naso lateral wall. We must admit that some cases require a window resection, but I feel and know that a great many of these cases will clear up by a probe puncture and irrigation of the maxillary sinus. I do not say that window resection should never be done, for I do them when I feel they are indicated and I have seen a great



many cases of severe frontal headache which cleared up after proper aeration and ventilation by doing a window resection. I will report one case tomorrow morning that cleared up by a probe puncture of the maxillary sinus, a case of persistent headache. I remember well the statement made by Dr. Skillern two years ago at the Indianapolis meeting. In speaking of infection of the frontals and ethmoids, he stated that with proper drainage, aeration and ventilation of the maxillary sinuses in many instances the ethmoids and frontals would clear up entirely.

In regard to Dr. Kearby's question, I think we should individualize every case.

#### UTERINE HEMORRHAGE OF BENIGN ORIGIN: RADIATION TREATMENT

DRS. ALBERT M. COLE, RAYMOND T. BEELER AND  
LESTER A. SMITH  
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The frequency of queries as to indications and contraindications for radium or roentgen treatment, particularly with reference to the newer applications of the high voltage deep therapy, has prompted this communication, which is a summary of present-day views, with personal observations. During the period from 1917 to 1926 inclusive, where our records are more complete, we have treated over 380 such cases, 129 of which were treated by high voltage x-ray.

We are here chiefly concerned with uterine hemorrhage of non-malignant origin in the woman nearing the close of active sex life. Such symptoms in the pre-pubertal and adolescent periods should by all means be handled by medical and the less radical surgical methods, if possible. Conservatism should permit irradiation only after other means have failed, and then with great care. In these young patients, however, a normal menstrual function can often be restored, with or without a temporary amenorrhea, provided full cooperation of the patient can be secured and the occasionally necessary repetition of light dosage applied. In these cases, abnormal endocrine action is a frequent indication for radiotherapy. All means should be taken to avoid unnecessarily heavy irradiation of the ovaries, although these glands are considerably more resistant in younger patients. This method is, however, well established clinically, although the exact mechanism of its action is not as yet completely understood. Either radium or the roentgen ray may be used. We feel that the actual dosage reaching the ovaries can be controlled a little more accurately with the latter. A temporary amenorrhea may be produced, but it has rarely lasted more than a few months with younger patients except when urgent symptoms required relatively heavy treatment.

Damage to the ova, with consequent abnormalities in development of normally delivered offspring, in the event of future pregnancy, evidently has been quite frequently over-rated. In an

experience of fifteen years, we know of no abnormalities in children born of women whose pelvis we have irradiated for metrorrhagia or fibroids, although several pregnancies in such patients have occurred. Investigation of the literature and the results of an inquiry among radiotherapists conducted by Dr. P. M. Hickey of the University of Michigan show that the possibility of such developmental abnormalities is not substantiated in practice. Various writers have stated that there is no well-authenticated instance of it in the literature<sup>1-2</sup>. Irradiation during pregnancy, however, has resulted in damage to the fetus. Pregnancies are less likely to occur in patients who have received more than the minimum castration dose and abortions are more frequent, especially when radium has been used. The ratio of abortions to normal labor in radium-treated women is about 1 to 2.6, while the estimated ratio in all non-irradiated cases in the United States is 1 to 3 or 4<sup>3</sup>. These figures are not at all unfavorable when it is considered that patients requiring irradiation present conditions necessarily tending to abortion, if, indeed, pregnancy can occur at all.

The ideal indications for pelvic irradiation are found in patients with menorrhagia or metrorrhagia between forty years of age and the close of the climacteric period, (1) who have findings indicative of intramural fibroids uncomplicated by other pathology, in whom the uterus is not larger than a four-month pregnancy and is not producing pressure symptoms; or (2) who have no demonstrable pelvic pathology but who show evidence of difficulty in adjustment to the altered ductless gland function incident to this time of life. Such patients will obtain brilliant results.

Symptomless fibromata usually need no treatment. It has been authoritatively stated<sup>3</sup> that possibly forty percent of all women have fibroids, while nearly all single women of middle age have them. However, competent observers have noted that even those producing no marked local symptoms are at least associated with some toxin which causes myocardial degeneration, the so-called "myoma heart." Huggins, quoted by Graves, found such degeneration in from forty percent to fifty percent of cases, in addition to frequent pyelitis which he ascribed to lowered resistance resulting from toxic products from the fibroids. However, very few of our cases have been symptomless.

Submucous fibroids *per se* offer no great difficulties in management, but are more likely to cause trouble under radium than under roentgen treatment on account of the possibility of localized degeneration from defective blood supply and the necessarily intense action of the radium resulting from close contact. Most of the cases coming with profuse, intractable and persistent hemorrhage, excluding malignancy, have been of this type and the extreme anemia (often only fifteen percent to twenty percent hemoglobin) requires quick and

effective, but gentle action. Blood transfusions are here of no assistance until the persistent loss has been checked. Careful, repeated, daily dosage with high voltage roentgen ray, or possibly an intra-uterine radium treatment, we have frequently found to be a life-saving measure. Extensive operations in the presence of such anemia are contra-indicated when such therapy in experienced hands is available. The fatty changes and the brown atrophy resulting from long-continued, severe bleeding do not tend to lower the surgical mortality rate. Later operative measures, when indicated, have not been found to be made more difficult if treatment has not been repeated more than once, but in the absence of polypoid submucous myomata operation is rarely necessary.

These almost exsanguinated patients have at times presented a sad object lesson. Frequently they are of the type who are so averse to surgery that no amount of argument or persuasion can induce them into it. No alternative having been offered them, the condition has become critical and the radiologist is hard pressed to find acceptable alibis for the responsible physicians. Right or wrong, this psychological attitude should be recognized and, as with the "radiophobe," the prescription adapted, as far as possible, to suit the case.

Patients with so-called "climacteric" bleeding, i.e., in whom organic pathology has been excluded by clinical and microscopic findings, are peculiarly adapted to this form of treatment. The ovaries being very sensitive to the rays at this age, the dosage required is not great and the procedure is particularly free from risk. Those over forty years of age with hyperplasia of the endometrium yield equally well as this has been shown to be characteristically associated with an increase in the process of ovarian follicular maturation, curable always by the removal of the ovaries or by radiotherapy. Novak<sup>4</sup> considers this the most ideal indication for radiotherapy in gynecology.

Simple uterine insufficiency, whatever may be its pathologic basis, yields quite satisfactorily as a clinical entity when properly irradiated, whether by radium or the roentgen ray. Follicle retention cysts of the ovary may be associated with severe hemorrhage, with or without demonstrable myomata. We have treated only such cases as the surgeon has deemed unsuitable for operation or those in whom chronic pelvic infection having rendered operation difficult, fragments of ovarian tissue have remained to cause disturbing symptoms. These have all given good results with the exception of one case in which the diagnosis was incorrect. There is but scant mention of such treatment in the literature. The roentgen ray is here more suitable.

Uterine polypi, especially if recurrent, may be curetted and then given a light dosage of radium, intra-uterine, except when infection appears to be

present. In the latter event, the roentgen ray is much safer if hysterectomy is contra-indicated.

The contra-indications to irradiation in uterine bleeding of benign origin may be tabulated as follows:

1. Conditions in a myoma.
  - Septic changes.
  - Aseptic changes,—notably calcification.
  - Subperitoneal or submucous tumors with a narrow pedicle.
  - Malignant degeneration.
  - Tumors larger than a four-month pregnancy.
2. Conditions in related structures.
  - Concurrent pregnancy.
  - Carcinomatous mucous membrane change.
  - Pressure symptoms from myoma, especially in the incarcerated type.
  - Acute gonorrheal infection.
  - Associated adnexal pathology, especially salpingitis or tubo-ovarian abscess.
  - Appendicitis.
3. General or constitutional factors.
  - Patient in early part of child-bearing period.
  - Post-menopausal tumors.
  - Blood dyscrasias, especially pernicious anemia or acute leukemia.
  - Patients with well-defined neurotic tendency or "radiophobia."
  - Uncertain diagnosis.

Several of the foregoing are relative contra-indications. A subperitoneal tumor with a broad pedicle will usually respond readily. We have occasionally had a polypoid intra-uterine myoma removed by the surgeon on the case, after which the remaining pathology readily yielded. Sarcoma of the uterus is relatively satisfactorily treated by combined radium and high voltage ray in rather intensive dosage, but conservatism has led us to advise surgery, when practicable, in suspicious cases. Such degeneration occurs in only about .7%—1% of myomata<sup>3-5</sup>. Ewing<sup>6</sup> thinks it must be quite rare, as he himself has found only three malignant uterine fibromyomata with general metastases, and only two with local recurrences, in an experience of over twenty years. He has found so-called "sarcomatous change" to be usually only a variation in the microscopic picture which is common in different persons and at different ages.

A myoma larger than a four-month pregnancy will often shrink markedly, and may be irradiated if there are contra-indications to surgery, particularly if treated with a combination of radium inside the uterus and roentgen ray externally. Malignancy involving the fundus should, of course, be irradiated intensively if operation seems inadvisable. Slight adnexal tenderness does not necessarily exclude roentgen ray therapy, which is much less likely to cause an exacerbation of infection than is radium. Tumors of benign type



persisting through the menopause usually respond readily if treated shortly after the menopause.

Degenerating myomata do not respond well to this treatment. Any enlargement of the uterine body which is associated with a material degree of local tenderness should never be given radium, and preferably never given roentgen ray. Where the first roentgen treatment is followed by well-marked uterine tenderness, fever and chilly sensations, the series should be discontinued. Irradiation only accelerates such degeneration and may precipitate severe sepsis.

There are few, if any, references in the literature to bad results from irradiation in blood dyscrasias, but in giving only light dosage to two patients with pernicious anemia we met with alarming leucopenia. The relative intolerance of the red cells to such treatment in these dyscrasias is well known.

The patient who fears the roentgen ray and radium is very trying to the radiologist, as she is very likely to interpret any imaginable symptom occurring later as being due to the treatment. The extreme neurotic, too, is better handled by surgery. If such is not feasible, irradiation should be given over a comparatively long interval and with great circumspection.

The best time for treatment is immediately after a menstrual period, but it may be instituted at any time. A course of high voltage roentgen ray may be spread out over a week or ten days, or longer if a slow action is desired, and radiation nausea practically eliminated. Except in the hemorrhagic cases with severe anemia we have usually handled these as ambulatory patients. This, like several other aspects of the roentgen ray method, is important from an economic standpoint. Often the usual daily occupation can be followed during the series. Ordinarily it can be resumed at once thereafter.

The next succeeding menstruation may be somewhat increased after either type of irradiation, but this has never been of really serious consequence. A second period may follow in younger women. Amenorrhea, temporary or permanent according to age and dosage, is usually then established. The skin reaction from roentgen therapy need not amount to more than a faint erythema, and usually only ninety percent of this skin dosage or less is given. This dosage and its factors are carefully checked, and the accuracy is demonstrated by the regularity with which certain skin effects are produced. It is important, however, that no skin irritants be applied over the treated areas for at least the succeeding two months, as otherwise it is possible to precipitate a reaction which exactly simulates a roentgen ray burn.

The time has passed when the misconception can hold that the roentgen ray and radium are competitors of the scalpel and curette. As time and experience have shown the proper provinces of

these agents, there has come a happy spirit of co-operation, preventing the patient from receiving ill-advised radiation on the one hand and needless surgery on the other. Today the majority of our hemorrhage cases irradiated have been referred directly from the surgeon or by the family physician after surgical consultation. With the present-day use of higher voltages, more penetrating rays and consequently a more efficient and accurate action upon ovaries and pelvic tumors, greater and quicker action is secured, hemostasis is better produced in the more severe hemorrhagic metropathies, and reduction of pathology is more prompt. Prolonged or repeated treatments are rarely needed. Radium is also helpful and has a very definite place in the management of these conditions. The two occupy an important niche in therapy.

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#### FOREIGN PROTEIN IN THE TREATMENT OF INFLAMMATIONS OF THE EYE\*

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HUNTINGTON

The intravenous injection of bacterial suspensions such as typhoid bacilli, colon bacilli or staphylococci; their intramuscular injection in larger doses; the intravenous injection of bacterial or other protein split products such as proteases, of colloidal metals; of distilled water or hypertonic salt solutions, of various serums and antitoxins; the intramuscular injections of milk or casein, etc., are all followed by a reaction that varies from a mere stimulation of leucocytes, to mild febrile reactions, and to extreme shock pictures associated with profound vaso-motor paralyses. The reaction varies with the substance used, its method of application and absorption, and its dosage; with the type of infection with which we are dealing; with the number of previous injections; with the physical condition of the patient; with the duration of the disease from which the patient is suffering; with the temperature of the patient at the time of the injection and other individual factors.

We do not know how much of the reaction that we elicit is necessary to bring about the therapeutic effect that we seek to achieve. We know that some substances provoke fever symptoms that are uncomfortable to the patient and yet seem

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quite as efficacious in their results. On the other hand some substances are followed with only a mild reaction and seem much less effective than the methods that are seemingly more drastic in their actions and much more unpleasant for the patient.

Usually the first symptoms that come to the attention of the patients following the injection is a chill or rigor. This may set in as early as fifteen minutes after the intravenous injection of a foreign protein, though it may be delayed for a couple of hours. With intramuscular injections of bacterial suspensions or milk the rigor commences in from two to four hours. The degree of the reaction varies; there may be merely twitching of the leg or arm muscles, or the rigor may be quite general and severe and last from twenty minutes to an hour. Commonly this phase of the reaction begins to wear off in from one-half to three-quarters of an hour after its inception. During this time the patient may complain of an actual sensation of chilling and demand extra covering and hot water bottles; in other cases there is merely the muscular twitching and trembling without sensory disturbances. Schmidt noticed that the reaction was independent of the dosage to a considerable degree, although after one or more doses had been given, the reaction was less marked. Shortly after the subsidence of the chill the patient may sweat profusely.

Few of the changes following non-specific therapy have received the study or attention that the leucocyte reaction has. It has been found that following the injection there is a leucopenia which is soon followed by a leucocytosis. In a series of cases I had during the year 1919 I found that all cases had a slight leucopenia before any injection was given and this was followed by a leucocytosis within six hours after the injection. Haller and Weiss studied the leucocytosis that was observed after milk injections, as did Schmidt and Kaznelson. The latter observers found a very slight increase in the eosinophiles after the first stage of the reaction had subsided. They state that the lymphocytes were increased over the normal for a period of several days after the polymorphonuclear leucocytes had reached the preinjection figures.

During the course of the last few years we have become familiar with the biological alteration that takes place in the organism after injections of non-specific proteins. These changes are numerous and complex, but the more important can be placed in two groups; those that deal with cellular stimulation, and those that result primarily from alterations in the permeability of the cells. The former have been broadly included by Weichart under the term, "Plasma-activation." Under the stimulus of moderate doses of non-specific agents cellular activity is markedly increased. This finds its expression in increased secretory activity of gland cells, increased activity of muscle

cells, increased activity of leucocytes (phagocytosis), etc.

The changes that take place in the permeability of the cell membrane have been studied by Luithlen, Starkenstein and others. The permeability of the tissue cells is increased—with a resulting outpouring of enzymes, of fibrinogen and prothrombin, of immune bodies, etc.; the increased permeability of the cells of the nerve cells is associated with a lowering of the threshold for nervous impulses and becomes manifest clinically in increased susceptibility to pain, general irritability, headache, etc. When this first phase has passed, compensation takes place in lessened permeability of the cells, with effects that are to be anticipated; lessened susceptibility to intoxication, lessened nervous irritability, lessened exudation and a lowering of the enzyme concentration. In an inflammatory focus supplied with highly vascularized granulation tissue the systemic effects of the injection of a non-specific agent will bring about an increase in the exudation of fluids, with increased redness and swelling because of the transient increase in the permeability. With this there is associated an increase in pain and tenderness, both because of the increased pressure and the lowering of the threshold of nerve stimuli. There will be increased digestion at the focus of inflammation; if there is no necrotic material present in the focus there may be no evidence of increased systemic intoxication; if the amount of necrotic tissue is large there will be first an increase in systemic intoxication when the material split down is absorbed; with more complete digestion at the focus complete detoxication may result. All these changes we associate with the focal activation that follows non-specific injections. To these may be added another factor and one more complex. It concerns the observation that any cell previously involved in an inflammatory reaction responds to stimuli of all kinds more readily than normal cells.

The augmentation in the inflammatory reaction which we have induced brings with it, as we have seen, an increased lymph flow. Coincident with it there has been a relative increase in enzymes, protease, eraptase, etc., an increase in the antibodies (if the infection has existed for some time), an increase in the leucocytes (after the initial leucopenia), together with an increase in their phagocytic activity, and an increased coagulability of the blood. The antibody, the leucocytic and the enzyme alterations must exert a considerable effect on an infecting agent as well as on the removal of the necrotic material; the tendency toward restitution to the normal would be enhanced. It is this phase that we see in the so-called second or positive phase. Its coincident constitutional effect that we witness in the euphoria, in the lowering of the temperature, improvement of the circulation, etc., is due to at least three factors—namely, the destruction of the toxic material at the focus after



the primary increase in digestive activity, lessened susceptibility of the cells of the body to intoxication (due to lessened permeability), and actual protoplasmic stimulation (partly from the non-specific agent injected, partly from the toxic material liberated from the inflammatory focus). This later factor varies greatly and the clinical estimation of the possible degree of this variation requires experience and care.

Isolated instances of successful vaccinothrapy when large doses of organisms were employed in certain cases of eye diseases have been reported during the past ten years or more. All men in eye work have had cases of corneal ulceration, iritis, iridocyclitis, hypopyon keratitis, etc., which have not responded satisfactorily to any type of therapy. All will be amazed at the remarkable results in many such cases if they will resort to the use of some foreign protein, either intramuscularly or intravenously. Miller and Thanner injected five cc. of milk intramuscularly in four cases of parenchymatous keratitis, all of whom improved, as did likewise eleven cases of iritis. It was noted by these men that when the iritis was due to gonococcus infection the improvement was not as prompt as in those of rheumatic origin or of undetermined etiology. In these cases the pain and photophobia disappeared in twenty-four hours. Friedlander began the treatment of trachoma with ten cc. of milk injected intramuscularly. In forty-two cases so treated the results were reported to be excellent. In these cases the injections were given every four days.

Huhn had noted that trachoma cases under his care in a hospital for children improved remarkably during the course of scarlet fever epidemic and then tried out the use of milk injections in order to simulate the clinical picture of the spontaneous disease. He reported that with milk injections he obtained excellent results.

Heinmann and Wilke reported excellent results with milk injections in adult blenorrhea and severe eye infections.

Igersheimer and Kraupa obtained remarkable results in iritis and found that in gonorrheal disease the results were usually very satisfactory both in adults and in children.

Jacovides treated about twenty-two cases of ocular disease with non-specific therapy. In 150 cases of ulcer of the cornea 140 were cured after two or three injections.

Veach produced experimental iritis by injecting streptococci, both veridans and hemolyticus, and staphylococcus aureus into the iris of rabbits. These were then treated with intramuscular milk injections. The course of the disease in the treated rabbits was definitely shortened as compared to the rabbits similarly infected but not treated with milk. Veach considers the experimental results sufficiently encouraging to warrant the use of non-specific protein therapy in clinical practice in all cases of iritis of uncertain origin.

Musy pasteurizes milk for fifteen minutes and injects five cc. intragluteally every two to four days. He was amazed to observe the rapidity with which the pain, injection, photophobia and swelling diminished under the course of such injections. In iridocyclitic processes the results were excellent; in iritis the pain subsided, the pupil dilated and corneal defects showed early vascularization; even in luetic cases with the formation of synechia, the milk injections assisted the systemic specific treatment. On the other hand, with chronic irido-choriocyclitis, in blenorrhea neonatorum and in tuberculous irido-cyclitis the treatment seemed to have little effect on the course of the disease.

Heine reports the results of his experiments with subcutaneous injections of milk in albuminuric retinitis. The dosage was from five to ten cc. If we regard the checking of the deterioration of vision as due in all cases to the milk injections, then out of seventeen eyes, fifteen were favorably effected thereby. If we consider only such cases as being favorably effected in which there was a marked improvement of vision, the favorable results number eleven, whereas in four the disease process was only stayed. In only two did the disease continue in spite of the injections.

I first became interested in the use of non-specific protein therapy about seven years ago. From the fact that there were many eye cases which apparently did not respond favorably to the ordinary methods of therapy, I began using intramuscular injections of milk. The results obtained in many cases were short of miraculous. This made me feel that when conditions were not progressing properly that I could rely upon foreign protein therapy as a valuable adjunct to other treatment. During the past five years I have used typhoid vaccine intravenously with excellent results and at times I have used milk in the same manner. By using foreign protein intravenously one will avoid any pain and tenderness at the site of the injection, and though the reaction is somewhat more drastic, the euphoria will appear within three hours after the injection, when all signs of the reaction have subsided.

#### CONCLUSION

The injection of foreign protein intramuscularly and intravenously, especially of milk and typhoid vaccine, in the treatment of eye inflammations, is one of the most energetic stimulants of the general defenses of the body. It constitutes one of the surest means of fighting the most varied of infections and particularly, infections of the cornea with ulceration, iritis, traumatic and post-operative infections, etc. It is very evident that injections of non-specific foreign protein, namely, milk and typhoid vaccine, exerts a marked influence on those infections in which it has been used. It is not believed, however, that this type of treatment is a cure-all. It does, however, open up new

possibilities and suggest good methods for attacking infections of unknown etiology. That all cases might not be benefited does not reflect on the value of the treatment. There are very few therapeutic methods which do not have the same objection. Personally I would dislike very much being without the use of foreign protein as a therapeutic agent.

## SPECIAL ARTICLES

### LEGISLATIVE RESUME

After what was generally considered to be the hardest battle of the entire legislature, the Huffman medical bill, carrying the injunction clause, licensing drugless healers, and placing a drugless healer on the medical board, was finally passed in both the House and Senate and signed by the governor. From the start the battle was hard fought and oftentimes dramatic.

The cultists, backed by the League for Medical Freedom, the Bernarr Macfadden forces and other opponents of scientific medicine, fought against the bill from the time it was introduced until it was signed by the governor. The victory was not due to any one man or group of men, but to the co-ordinated work of the entire profession.

The officers of your state medical association feel that this legislation which is enacted in the interest of public health is a great victory for the public and for scientific medicine.

#### *Organization*

This legislation was passed only as the result of an efficient and active state-wide organization composed of:

1. A central state legislative committee which was on the job in Indianapolis day and night during the session.

2. Local county committees which, in most cases, acted earnestly, energetically and efficiently.

3. District organizations which held pre-session meetings that were attended by the committeemen of each legislative district.

These district organizations functioned unusually well and a firm basis for our state-wide organization was based upon these meetings.

4. The headquarters office kept the various county legislative chairmen in touch with what was happening in Indianapolis.

5. As a result of this organization, more than 450 individual physicians from outstate came to Indianapolis during the session when called on by the state committee. The work of these individual physicians cannot be praised too highly for they each came to Indianapolis with a definite assignment and did not leave the battle front until this assignment had been carried out.

#### *Provisions of the New Amendment to the Medical Practice Act*

The new amendment provides in short that the governor appoint a drugless healer, other than an osteopath, upon the State Medical Board, and that all drugless healers in the state of Indiana who have a diploma from a drugless school and who were engaged in practice on January 1, 1927, be given a limited license to practice his branch of drugless healing without an examination. It provides further, that hereafter any man who is practicing medicine as defined by law in the state of Indiana without a license may be enjoined.

The new amendment makes the Medical Practice Act enforceable, and in the future insures that anyone who sets himself up to heal, diagnose or treat human disease by whatever method, shall be qualified in the basic sciences.

#### *The Battle in the House*

Walter Huffman, representative of Elkhart county, sponsored the bill which was introduced in the House early in the session. Through the fine generalship of Mr. Huffman and our friends, the bill came out of the Committee on Public Health with a unanimous report in favor of passage, withstood many attacks made upon it, withstood the second reading, and was passed on third reading after one of the most dramatic scenes ever witnessed in the House of Representatives when Edward E. Eikenbary, representative from Wabash county, insisted upon leaving his sick bed in the hospital and coming to the legislature to cast his vote "in the interest of House Bill 39 and public health." Mr. Eikenbary's vote gave us the 51 votes necessary for a constitutional majority. This was a big blow to the cultists who firmly believed that no bill carrying an injunction clause could ever pass the House of Representatives.

It is difficult to point out our special friends in the House of Representatives, for we owe a great debt of gratitude to all who voted for our bill, but we do want to mention those who took the floor in our behalf: Walter Huffman, sponsor of the bill; Oscar A. Ahlgren, William C. Babcock, Edward E. Eikenbary, Charles V. Kellar, J. C. Knight, M.D., I. N. Trent, M.D., Benjamin F. Wray, M.D., Glenn Harris, and our ever-faithful friend, Harry G. Leslie, of Tippecanoe, speaker of the house, without whose support the bill never could have passed. Too much praise cannot be given Speaker Leslie for his fearless friendship for the medical profession.

#### *The Battle in the Senate*

The bill in the Senate was sponsored by Senator L. H. Bradford, of South Bend, senator from St. Joseph and Marshall counties, and by John Hewitt, M.D., Terre Haute, senator from Sullivan and Vigo counties.

After failing to stop the progress of 39 in the House, the cultists concentrated all their efforts



against H. B. 39 when it came up in the Senate. They literally flooded the Senate with petitions.

The cultists also put on a big advertising campaign throughout the state which was successfully met by the various county medical societies. So intense did the battle grow that our opponents demanded a public hearing, with the result that on the night of the hearing the Senate chamber was crowded with more than 2,400 spectators whose sympathies were very evenly divided. This was the largest attendance at a public hearing this session and perhaps of any session. Naturapaths, napropaths, chiropractors, suggesto-therapists and the League for Medical Freedom were all represented at this hearing. On the side of the medical profession, Walter Huffman, author of the bill, made the opening speech, and Albert Stump, who was a candidate for senator on the Democratic ticket in the recent election, made the closing speech for the medical profession. The other talks were made by physicians. During this meeting the excitement at times grew so intense that the galleries broke forth in cheers, first for one side and then for the other.

Several days after the public hearing, the bill came out of committee with a unanimous report for passage, but the battle had just started. Delays, due to one cause and another, kept our bill from coming up for passage for more than a week, and it took eight roll calls before it finally was passed in the Senate by an overwhelming vote of 35 to 15. The battle to obtain this majority on final passage came only after a terrific parliamentary struggle in which both sides employed every tactical weapon that is known to parliamentary procedure. At one time the bill was saved only by one vote.

It is difficult to mention outstanding friends in the Senate, but the medical profession should never forget the fine work of Lieutenant-Governor Harold Van Orman, who showed himself to be one of the most capable parliamentarians and presiding officers in the history of the Indiana Senate. The fair and fearless manner in which he handled the situation under the most trying circumstances will never be forgotten by those who were on hand to see the battle.

Further, the medical profession owes a debt of gratitude to such friends as Senator Bradford, who mapped out the campaign for the passage of the bill in the Senate. An undying vote of thanks should be given to John Hewitt, M.D., who sacrificed his own personal ambitions in the Senate to aid in the passage of H. B. 39. It was Dr. Hewitt who bore the brunt of the attack against the profession in the Senate and who took the floor in favor of 39 when it came up for final passage and put to route the attacking forces led by Senator Sims, the leader of the chiropractic forces in the Senate. On the final roll call effective speeches for 39 were made in the Senate by L. G. Bradford, Bruce E. Cooper, Joseph M.

Cravens, William P. Evans, Russell B. Harrison, John Hewitt, A. Ketchum, James J. Nejd1 and William F. Hodges. All in all, the 35 to 15 victory was a tremendous vote of confidence in scientific medicine and the medical profession of Indiana.

#### *Signed by the Governor*

Despite the overwhelming 35 to 15 defeat administered the cultist forces in the Senate, our opponents beseiged the governor's office with delegations, with telegrams, and with letters asking Governor Jackson not to sign H. B. 39. The governor signed House Bill 39 upon Friday, March 11, in the presence of Mrs. Richard Lieber.

#### *How the Various Members Voted*

The only roll call in the House of Representatives upon H. B. 39 came upon third reading of the bill and showed the following vote:

#### THOSE VOTING FOR THE BILL

Name.	County.
O. A. Ahlgren,	Lake.
W. C. Babcock, Jr.,	Jasper-Newton.
Guy Ballard,	Miami.
H. F. Batterman,	Lake.
William C. Bond,	Henry.
H. V. Brown,	Floyd.
D. H. Byers,	Knox.
L. E. Carlson,	Huntington.
J. W. Chamberlain,	Vigo.
L. D. Claycombe,	Marion.
J. P. Curry,	Ripley-Switzerland.
H. R. Donnell,	Decatur-Jennings.
E. P. Eagles,	Noble.
E. E. Eikenbary,	Wabash.
Sam J. Farrell,	Blackford-Grant.
H. T. Ferguson,	Clark.
Ed. Fulwider,	Howard.
F. G. Gilbert,	Lagrange-Steuben.
Thomas Grant,	Lake.
A. D. Gray,	Morgan.
R. L. Greenawalt,	Elkhart.
E. Y. Guernsey,	Lawrence.
J. G. Harris,	Lake.
M. A. Holloway,	Randolph.
W. A. Huffman,	Elkhart.
W. Hunt,	Hamilton.
Charles V. Kellar,	Benton-White.
F. Knepper,	Kosciusko.
J. C. Knight,	Grant.
C. M. LaFollette,	Vanderburgh.
O. P. Lafuze,	Wayne-Union.
E. Livingston,	Knox and Pike.
D. L. McKesson,	Marshall.
W. W. Martindale,	Hancock-Madison.
Mrs. C. A. Mason,	Vigo.
I. A. Mendenhall,	Daviess.
William A. Morris,	Clinton.
L. A. Pittinger,	Delaware.
J. J. Rice,	Fountain.
R. R. Ridenour,	Dekalb.
Samuel K. Ruick,	Marion.
M. J. Salwasser,	Laporte.
L. L. Shull,	Howard-Tipton.
J. F. Smith,	Tippecanoe.
R. W. Smith,	Laporte-Starke.
J. W. Thiel,	Lake.
G. W. Thompson,	Bartholomew.
I. N. Trent,	M.D., Delaware.
A. J. Wedeking,	Perry-Spencer.
R. E. Worley,	Vigo.
Benjamin F. Wray,	Cass-Carroll.

Total—51.

THOSE OPPOSED TO THE BILL.

Name.	County.
A. P. Barlow,	Hendricks.
E. B. Bender,	Boone.
Melvin Blain,	Allen-Whitley.
Frank Borns,	Marion.
William Bosson,	Marion.
E. J. Braun,	Allen.
James B. Brewster,	Crawford-Harrison.
John A. Byers,	St. Joseph.
Can Clark,	Brown-Jackson.
Frank E. Cline,	Johnson-Marion.
H. S. Collins,	Posey-Vanderburgh-Warrick.
H. W. DeHaven,	Marion.
William Dentlinger,	Fayette-Franklin.
Harlan R. Denton,	Putnam-Owen.
Addison Drake,	Sullivan.
R. V. Duncan,	Marion.
J. W. Ebaugh,	Marion.
F. A. Freemyer,	Jay.
Ella V. Gardner,	Marion.
C. Elmer Garrard,	Parke.
H. F. Grimwood,	Vanderburgh.
Fabius Gwin,	Dubois-Martin.
William H. Harrison,	Marion.
Thomas Hawkins,	Shelby.
Arthur L. Hiatt,	Madison.
J. A. Hughes,	Vermilion.
O. G. Jamison,	Greene.
Charles T. Jones,	Fulton-Pulaski-Wayne.
J. M. Knapp,	Wayne.
S. R. Lankford,	Orange-Washington.
Charles Worley,	Madison.
Frank E. Wright,	Marion.
B. G. McCleilan,	St. Joseph.
Payne Morgan,	Allen.
T. G. Murden,	Cass.
W. B. Ringo,	Clay.
M. F. Robertson,	Monroe.
G. L. Saunders,	Adams-Wells.
George Stolte,	Allen.
William Storen,	Jefferson-Scott.
C. M. Trowbridge,	Henry-Rush.
H. J. Weinke,	St. Joseph.

Total—42.

THOSE NOT VOTING

Name.	County.
H. C. Bennett,	Dearborn-Ohio.
French Clements,	Vanderburgh.
William H. Lee,	Gibson.
Frank D. Nolan,	Montgomery.
John W. Scott,	Lake-Porter.
William F. Werner,	Marion.

Total—6.

How Senators Voted

There were eight roll calls taken in the Senate. The following table is the manner in which the Senators voted on each of the eight roll calls. Those with a \* mark voted in favor of the med-

ical profession on each roll call, and those with a zero mark voted against the medical profession.

	February 26. Sims' motion to make bill special order of business March 4.	Bradford's friendly amendment to 39.	Branan amendment (unfriendly)	Sims' diploma amendment tabled by Nejd.	Senator Cravens' motion to send bill to engrossment.	March 2. Benz motion for withdrawal.	Martin's motion to recommit.	March 4. Third reading and final passage of bill.
ALLDREDGE	0	0	0	0	0	0	0	0
BEESON	*	*	*	*	*	*	*	*
BENZ	*	0	*	*	*	*	*	*
BLACKBURN	*		*	*	0	*	*	*
BRADFORD	*	*	*	*	*	*	*	*
BRANAMAN	0	0	0		0	0	0	0
BROWN	0	0	0		0	0	0	0
CANN		*	0	0	0	0	0	*
CLANCY	0	*	0	0	0	0	0	0
COOPER	*	*	*	*	*	*	*	*
CRAVENS	*	*	*	*	*		*	*
DAVIS	*	*	0	*	0	*	*	*
DICKERMAN	*	*	*	*	*	*	*	*
DOOGS	0	0	0			0	0	0
DRAPER	0	*		*	0		0	*
DURHAM	0	*	0	*	0	0	0	*
EVANS	*	*	*	*	*			*
FITCH	0	*	0		*	0	0	0
GARROTT	*	*	*	*	*	*	*	*
GOTTSCHALK	*	*	*	*	*	*	*	*
GRAY						*	*	*
HARLAN						*	*	*
HARRISON	*	*	*	*	*		*	*
HEWITT	*	*	*	*	*	*	*	*
HILL					*	*	*	*
HODGES	*	*	*	*	*	*	*	*
HOLMES						*	*	*
INMAN	0	*	0	0	0	0	0	0
JOHNSON						*	0	*
KETCHUM	*	*	0	0	0	*	*	*
KLINE	0	0				*	*	*
KOENIG						0	0	0
LEONARD	*	*	*	*	*	*	*	*
LINDLEY	0	*				0	*	*
LOCHARD	*	*		*	*	*	*	*
MARKEL	*	*	*	*	*	*	*	*
MARTIN	0		0	0	*	0	0	0
MOORHEAD	*	*	*	*	0	*	*	*
NEJDL	*	*	*	*	*		*	*
NOTTINGHAM	*	*	*	*	*	*	*	*
O'ROURKE								0
PAYNE	0	0	0	0	0	0	0	0
PELL		*	0		0	*	*	*
PERKINS	0	0	0		0	0	0	0
QUILLIN	0		0		0	0	0	0
SHAKE	*	*	0	*	0	*	0	*
SHANK	0		0			0	0	0
SHERWOOD	*	*	*	*	*	*	*	*
SIMS	0	0	0	0	0	0	0	0
STEELE	*	*	*	*	*	*	*	*



### *Opposition to the Bill*

Opposition to H. B. 39 was led by the chiropractors, the League for Medical Freedom, Bernarr Macfadden interests, and the chiropractic schools who desire low standards for practice. The opposing forces put in three bills. The first bill, H. B. 117, chiropractic bill, was introduced by Representatives Greenawalt and Bender. This was similar to attempted cult legislation of past sessions which created a separate board for chiropractors.

H. B. 141, naturopathic bill, introduced by Representative Duncan, of Marion county, which asked for a naturopath as a member on the State Board of Medical Registration and Examination and giving certain privileges to naturopaths in meeting examination requirements of the board.

H. B. 215, introduced by Representative Harrison, of Marion county, which abolished the present medical board and created a board of medical registration and examination composed of laymen with subsidiary boards for each school. This bill really amounted to nothing more than the creation of separate cultists boards.

### *Chiropractic Legislation in Other States*

During the time that H. B. 39 was considered before the general assembly, several other states created laws which provided for the licensing of chiropractors and cultists under their own boards.

### *Our Allies*

As the battle progressed, the friends of the bill grew in numbers. Through a campaign of education, it became known that this was a measure in the interest of public health and was being opposed by such personages as Bernarr Macfadden. The Parent-Teachers' Association and the Indiana Tuberculosis Society allied themselves with the medical profession. The *Indianapolis News* and *Indianapolis Star* and many other papers throughout the state spoke feelingly in editorials upon the necessity of cleaning up Indiana in a medical way.

Various other lay organizations and individuals helped in the battle and the medical profession wishes to take this opportunity of thanking these many laymen who, as friends of scientific medicine, and with no ulterior motive, used their influence for the passage of the Huffman bill and the gaining of the governor's signature.

### *Refutation of Charges of Indifference on the Part of the Medical Association*

Those who were in Indianapolis during the meeting of the legislature will vigorously refute any charges that the medical profession is indifferent when it comes to legislative activities. During the session more than 450 physicians from throughout the state visited Indianapolis, many leaving their practice and coming to the capitol to help in the legislative fight whenever they were called. This meant a great deal of sacrifice and loss of time and money on the part of these individual physicians.

The amendment containing the injunction clause gives the public a method of enforcing the Indiana Medical Practice Act.

### *Misunderstanding Concerning Injunction*

The general injunction law of Indiana under the new amendment *applies only to those persons who are practicing medicine in the state without a license*. The court has to decide only one question, "Has this man a license or hasn't he a license?"

The officers of your State Association feel that Indiana now has the best medical practice act in the country. There will be no chaos such as took place recently in Illinois and Ohio where cultists "were put out of business" and assumed the role of martyrs before the public. The law means, however, that anyone who comes into the state after January 1, 1927, must take an examination in the basic sciences, no matter what method he chooses to practice. It provides that this man shall have the same fundamental **qualifications** before he can set up an office to heal the sick as the medical student. This law, your officers believe, is the greatest step which has been made in the interest of public health since the passage of the original medical practice act.

### *Suggestions for Future Legislative Organization*

1. Every county society should have its legislative committee of three or more men.
2. The legislators who voted in favor of H. B. 39 should be invited to address the various medical societies. The medical societies should express their appreciation to those representatives and senators who supported H. B. 39.
3. The various county legislative committees should make suggestions to the state committee which may help to build up the legislative organization of our association.

FRANK W. CREGOR,

President.

THOMAS A. HENDRICKS,

Executive Secretary.

### **NEWS NOTES FROM INDIANA UNIVERSITY SCHOOL OF MEDICINE**

During the summer of 1927, short courses beginning June 10th and lasting for six weeks, will be offered to the physicians of Indiana, by the Indiana University School of Medicine at Indianapolis. Unusual clinical and laboratory facilities are available for these courses and opportunity is offered for graduate study. Courses are described in the March issue of the University newsletter. Participation in supervised handling of cases in the wards of the James Whitcomb Riley Hospital for Children and the Robert W. Long Hospital is expected to add to the value of lectures and ward rounds in the study of newer therapeutic agents and methods for practicing physicians. Special emphasis will be given post-graduate courses in physical therapy, bio-therapy and drug

therapy. A course to be offered practicing physicians for the first time in Indiana is that in Physical Therapy (Medicine 18A). The course will be conducted by a graduate physician who has specialized in this field and is now teaching the introductory courses to senior medical students, with the assistance of other members of the medical staff. There will be demonstrations of the methods of physical therapy as applied to patients in the medical and surgical wards of the University hospitals. Opportunity will be offered a limited number of physicians to act as volunteer assistants in the practical work of this department. Classes will meet Mondays, Wednesdays and Fridays from 9:30 to 10:30 a. m. The course is designed to acquaint practicing physicians with the technique of physical therapy for their own use, and contraindications as well as indications for its use will be pointed out. It is said that much of the information regarding apparatus and methods of treatment now available to physicians is put out by manufacturers' agents and is necessarily biased by the commercial viewpoint. The School of Medicine will emphasize and teach the correct scientific and therapeutic bases for the newer methods and apparatus. Another new course will be in modern drug and bio-therapy, with lectures and demonstrations of the use of the newer drugs and various biological products, serums, vaccines and so forth. This class will meet Mondays, Wednesdays and Fridays from 12:00 to 1:00 o'clock. Other courses will be offered in bio-chemistry, pharmacology, physical diagnosis, general pathology, nutrition and in disease production and resistance. Clinics will be held in dermatology, genito-urinary, gynecology, ophthalmology, rhinology, otology and laryngology and surgery. Ample clinical material in both hospital and dispensary patients is available for these clinics. Since the number of students enrolling in these courses must necessarily be limited, and the giving of the various courses is dependent upon the number of applicants for each course, it is urged that those desiring to enroll apply to the registrar, Indiana University School of Medicine, Indianapolis, for registration card, indicating the course desired. Further information regarding the schedule, nature of the courses and fees may be obtained from the registrar.

Units of the Indiana University School of Medicine in Indianapolis were given additional appropriations for equipment and maintenance by the 1927 legislature. For the maintenance of the William H. Coleman Hospital for Women, the \$350,000 gift to the University of Mr. and Mrs. William H. Coleman, of Indianapolis, now in process of construction on the campus of the medical center, the sum of \$75,000 per year was appropriated. This money will become available when the hospital is ready to receive patients. The new unit, which will be a teaching hospital

of the School of Medicine, will be used exclusively for obstetrical and gynecological cases, with a bed capacity of approximately seventy-five. Construction of the remaining portion of the medical school building which was planned but not completed in 1918 because of war conditions, was made possible through the sale to the state for \$100,000 of the old medical school building at Senate Avenue and Market Street, which the legislature approved. An appropriation of \$25,000 a year for the next bi-ennium was made for equipment and necessary alterations. The completed unit will contain an auditorium for medical society meetings and seminars seating 500. It will also house the administrative offices which have been temporarily located in space which will now be available for expansion of the medical library. More adequate library facilities will be made possible by an appropriation of \$20,000 a year for the next bi-ennium for purchase of additional reference books, journals and stacks. An additional \$10,000 a year was also provided for operation of the medical school and Long Hospital. The School of Dentistry, still located in a leased building at Pennsylvania and Walnut Streets, which has depended entirely on student fees for its support, was given \$15,000 a year for the next two years.

Plans for the new Ball nurses' home and training school are ready for submission to contractors, according to announcement from the office of Dr. S. E. Smith, provost. The new building will be located just west of the Coleman hospital, facing West Michigan Street. It will contain residence quarters, classrooms and laboratories for approximately 300 members of the Training School for Nurses of the School of Medicine. It is made possible by a gift to Indiana University of \$500,000 from the Ball Brothers, of Muncie.

Modern equipment for motion pictures and lantern slides in the demonstration of surgical and medical subjects will be provided in the auditorium of the completed medical school unit. A committee of the medical school which is co-operating with the architect, Robert Frost Daggett, in revision of the original plans drawn in 1918, is composed of Dr. Virgil Moon, Dr. B. B. Turner, Dr. S. E. Smith, Dr. E. V. Hahn, Dr. Charles P. Emerson and Robert E. Neff, registrar and administrator of the University hospitals.

At the monthly seminar of the School of Medicine March 25th, the anniversary of Sir Isaac Newton was observed. Dr. B. B. Turner, professor of bio-chemistry and pharmacology, spoke on "Sir Isaac Newton and Two Hundred Years After." Dr. Edwin N. Kime, associate in medicine, discussed phases of physical therapy in a talk on "Light and Life." Cases from the Robert W. Long Hospital and James Whitcomb Riley



Hospital for Children were presented and discussed by members of the resident staffs and instructors. A number of outside physicians were present as guests of the School of Medicine and joined in the social hour which followed.

Approximately 150 physicians from all parts of Indiana, alumni of Indiana University and the Phi Chi medical fraternity were in attendance at the annual Founders' Day banquet which followed initiation of twenty members at the Hotel Lincoln, February 26. Dr. LaRue Carter, associate in mental and nervous diseases, was toastmaster and speakers included Dr. Albert Sterne, professor of mental and nervous disease; Dr. L. A. Ensminger, associate in surgery; Dr. O. G. Pfaff, professor of gynecology; Dr. K. L. Craft; Dr. E. D. Clark, professor of surgery and secretary of the School of Medicine; Dr. Arthur M. Mendenhall, associate professor of obstetrics; Dr. William E. Gabe and Dr. William A. Doeppers, superintendent of the City Hospital.

Dr. Ralph C. Williams, of the United States public health service, was principal speaker at the banquet of Theta Kappa Psi medical fraternity at the Severin Hotel, February 25th. Dr. C. W. Rutherford, associate in ophthalmology, was toastmaster.

Dr. Howard B. Mettel, assistant in pediatrics, spoke on the prevention of goitre in children, at the meeting of the Indianapolis Council of Women at the Hotel Lincoln, March 1st. He cau-

tioned against the promiscuous use of iodine without medical supervision.

Dr. Robert M. Moore, associate in medicine, addressed the Madison County Medical Society February 15th, his topic being, "Observations on Active Rheumatic Heart Disease."

Dr. and Mrs. Charles F. Thompson, 308 West Forty-fourth Street, announce the birth of a nine-pound son, Charles Bridge, their first child, March 16th. Dr. Thompson is assistant in medicine.

Copies of old medical journals are wanted for the medical library of the Indiana University School of Medicine. Mr. Alan Hendricks, librarian, who recently issued a list of the various Indiana medical journals, says that many copies are lacking from his files, and that it is not possible in some cases to purchase them. He is especially anxious to secure copies of journals which preceded the Indianapolis Medical Journal. He thinks that in the course of spring housecleaning, many old journals may come to light, and as they are probably of no value to the present owners, he asks that they be given a safe and useful resting place in the medical library here. The library will pay transportation charges. Information may be addressed to Alan Hendricks, librarian, Indiana University School of Medicine, 1040 West Michigan Street, Indianapolis.

C. R. MACDONNELL,  
Indianapolis.

#### KAHN PRECIPITATION TEST FOR SYPHILIS

The evidence collected by J. G. Hopkins and Walter M. Brunet, New York (*Journal A. M. A.*, January 29, 1927), by means of a questionnaire brings out the following points: 1. The present technic of the Kahn test is superior to the earlier technic. 2. The results obtained by the Kahn test (present technic) correspond to those of the Wassermann test, in a large majority of cases. Either test is negative in isolated cases of syphilis and positive in instances in which the serum reaction is the only evidence of syphilis. 3. A small number of Wassermann positive serums give negative Kahn reactions. 4. A slightly larger number of Wassermann negative serums give positive Kahn reactions. 5. The Kahn test is somewhat more sensitive than the Wassermann in primary syphilis and more persistently positive in many treated cases. 6. The main disadvantage of the Kahn test is its failure in a few cases showing a definitely positive Wassermann reaction. 7. The main advantages of the Kahn test are comparative simplicity of procedure, rapidity of obtaining results, its usefulness with anticomplementary serums, and the fact that it reveals a reaction in some cases in which the Wassermann reaction is negative or doubtful.

#### STUDIES IN TUBERCULOSIS

A biologic method has been devised by Frederick Eberson, San Francisco (*Journal A. M. A.*, January 29, 1927), for identifying specific skin-reacting substance in the blood serum of tuberculous patients and animals. A heat-sensitive skin-reacting substance of the nature of a toxin has been identified in the blood serum of tuberculous patients and guinea pigs. It is not found in normal human or guinea pig serum. The substance does not

behave like tuberculin or its related elements which are heat-resistant, and it exists independently of these. It is present in largest amounts in far advanced tuberculous infections with profound toxemia, and is apparently destroyed by heating at from 60 to 65 C. for from twenty to forty-five minutes. In normal animals this unheated substance gives a positive skin test owing to its interaction with normal antibodies for tubercle products. The method devised for identifying this specific skin-reacting substance depends, in principle, on a living "indicator," the guinea pig, which measures related or identical elements in the serum to be tested. The procedure was made possible by a previous demonstration that normal animals could be sensitized with fractional tuberculins prepared from nonprotein substrates. Skin reactions obtained according to the technic described in these experiments are referable to an addition or subtraction of one or more of the interacting substances present in tuberculous serum and in the tissues of the experimental animal. The heat-labile substance, probably a toxin, in tuberculous serums can be used as a measure of the circulating antibodies in normal and tuberculous persons. A test of this type may serve as an index of the bodily resistance to tuberculous infection in both groups. Certain theories and hypotheses regarding tuberculin and skin sensitivity find controllable experimental evidence in the observations described. An explanation is offered for negative tuberculin tests in far advanced tuberculosis, and, furthermore, positive reactions with tuberculous serums in apparently normal persons are to be attributed to a toxin. Accordingly, the results with the auto-serum test of Lenz, with modified auto serum and with the Wildbolz reactions take on a somewhat different interpretation.

## THE JOURNAL of the

### Indiana State Medical Association

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.

Editor and Manager

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APRIL, 1927

## EDITORIALS

### THE NERVOUS CHILD

Every doctor, whether he is in general or special practice, is consulted frequently by mothers concerning various abnormalities in their children which are attributed to nervousness and which the doctor is supposed to correct through the medium of medicine. Oftentimes the mother will say that her child is petulant and cross, suffers from disturbed sleep and loss of appetite, even if there are no more pronounced symptoms indicating imperfect digestion and elimination, but seldom does the mother admit that these manifestations are brought about by her own carelessness and sins of omission and commission in not having her child live a rational life. Even the doctor altogether too frequently listens to the history given by the mother and winds up by prescribing either a tonic or a sedative without determining and analyzing the cause that may be back of all of the trouble. As a matter of fact, there are altogether too many mothers who are killing their children, figuratively speaking, by kindness. They want their little darlings to have a good time, and consequently improper feeding, including irregular hours and improper food, is a common fault, and added to this is the prevailing tendency now days to afford the child too much excitement and give him too little rest. Even with a good constitution and normal resisting power he may suffer from the effects of family indulgence and the selfishness on the part of the parents who obtain enjoyment from having their little darlings have a good time even at the expense of physical and nervous energy, little realizing that the child cannot stand up under dissipation and soon has a shattered nervous system as a result of too much indulgence. Likewise, the average doctor makes a serious mistake in handling these cases when he coddles the mother instead of telling her, brutally and frankly if necessary, that she alone is responsible for her child's condition. In fact, it is our opinion that there are altogether too many doctors who for one reason or another are afraid to say that a child needs no medicine but does need rest, simple food, and plenty of fresh air and sunshine. Too many parties and too much exciting play and irregular hours is bad for any child. It breeds nervousness and disturbs sleep, to say nothing of developing a peevishness and irritability that can be avoided. Added to this, irregular meals and an overabundance of pastries, sweets,

and many other things that make for an ill-balanced ration, and the picture is complete. Concerning the question of food, there are altogether too many mothers who humor their children. A child should not be coaxed to eat, nor on the other hand should be permitted to eat at irregular hours. He should have three meals a day at the appointed time, and if he does not eat at that time he should go on to the next without piecing, and the appetite will return. If he does not like good, wholesome food it is because his appetite has been pampered, and the sooner he is, figurately speaking, starved to a rational diet, the better it will be for the child. It is perfectly ridiculous to pay any attention to a mother's statement that a child cannot eat one of four or five plain but nutritious foods. The best way to overcome such a condition of affairs is to tell the mother that the child is going to be put on rigid diet for purposes of treatment, and then prescribe the kind of food that may be given and insist that it is the only food that the child shall have. The child may stubbornly refuse to eat two or three meals, but in the meantime the stomach has had a needed rest, and at the end of the prieve, some good wholesome food not only is relished but will prove very beneficial. After that the battle is easy if the mother does not resume the coddling. If doctors will be more thorough in their recognition of the real causes back of the nervousness of children, and insist upon some such regime as here mentioned, there will be less complaint from mothers about nervous and peevish children. In fact, "mother's little angel" that always has been coddled and humored in everything will, under strict regime as to rest and other habits of life, turn out to be a very lovable child instead of one with a peevishness and disturbed disposition that makes everyone who comes into contact with him want to paddle him. This whole matter of curing some of these nervous children is one that means the co-operation of both the mother and the family physician, but the family physician must not only recognize the predisposing factors in the case but have the nerve to insist upon prescribing appropriate remedies and having his recommendations faithfully carried out.

### DEATH OF DR. DUEMLING

Indiana, and a large territory in adjoining states, has lost a great man in the death of Dr. Herman A. Duemling, chief surgeon of the Lutheran Hospital of Fort Wayne, the news of which was delayed in reaching the editor of THE JOURNAL who was in Europe at the time. Not only was Dr. Duemling an able surgeon, with a wide experience in operative work, but he was a man beloved by all who came in contact with him. He was thoroughly unselfish, and he exhibited an unusual amount of sympathy and charity for the sick and suffering. He was loved by his professional brothers because of his attainments and resourcefulness. his unfailing good nature. his



forgiving disposition, and his ever ready offer of help and assistance, particularly to the younger men of his profession. Naturally progressive, he left no stone unturned to make his work and everything connected with it represent the highest development of professional art. His administrative ability and wise councils are exemplified in the splendid institution over which he so long presided as chief surgeon and executive officer. Aside from his prominent place in the medical field, he also stood high in civic work where he invariably took a stand in support of every progressive movement for the betterment of the people or the community. His untimely death was a great shock to all who knew him, and his passing marks the loss of a great benefactor and to thousands a genial and devoted friend.

#### OUR NEW MEDICAL LAW

Throughout the length and breadth of this land the pseudo-medical cults have for years put up a valiant fight in legislative halls to secure legal recognition, and Indiana, like some other states, has been a fighting ground. In several states the chiropractors have succeeded in establishing separate examining and licensing boards, which in our judgment is highly detrimental to the interests of the public, as it legalizes the practice of uneducated and untrained men. Early during the last session of our Indiana Assembly it became evident that the drugless cults had a strong following and would put up a strong fight for separate recognition. It then devolved upon our legislative committee to thwart these efforts and secure medical legislation that would best protect the public and offer the least compromise to the pretenders. It was only after weighing all of the possibilities and analyzing the situation at every angle that it was determined that rather than have a separate board of chiropractors, which seemed evident would be the final result if a compromise was not accepted, it would be better to accept a modification of our medical law and permit the chiropractors to have a representative on the present medical board. However, it was made a part of the law that a chiropractor who has not practiced in Indiana prior to January 1, 1927, must comply with the requirements exacted of every other practitioner of medicine insofar as the basic principles of practice are concerned. That means that hereafter chiropractors who receive legal recognition must have had training in the cardinal branches of medicine, excepting only therapeutics, surgery and obstetrics. Aside from this, our committee fought for and succeeded in obtaining an injunction clause in the law, which makes it possible to prohibit an unlicensed person from practicing within the state. The pseudo-medical cults, and in fact all of the antis, fought this bill from start to finish, and no bill came up for consideration in either the House or Senate that met with such heated and prolonged discus-

sion. After a bitter fight, a fight that even was carried up to the governor in an effort to secure his veto, the bill finally was signed and became a law. While the chiropractors have received recognition it is not to their liking, but eventually they must see that the provisions pertaining to their recognition are no more than right and just in the protection of the public. The crux of the whole matter is that when a chiropractor receives education in the cardinal branches of medicine, and learns to recognize and diagnose disease conditions with a semblance of scientific accuracy, he ceases to be a chiropractor, or at best he is not such a menace to the community as long as his actions are determined to some extent by some education rather than total ignorance. Furthermore, he must stick to his manipulations and not try drugs or practice surgery or obstetrics. It is our candid opinion that the legislation is a very satisfactory solution of the problem that confronted us, and certainly the legislative committee and the whole medical profession of the state who worked so valiantly for its success ought to be congratulated upon the result. Here and there were found bands of medical men who either were indifferent and apathetic concerning this legislative program, or actually opposed the legislation secured, but such instances were few and far between. On the whole, the profession individually and collectively stood strongly back of the legislative committee and the active workers who helped to bring about the passage of the new medical practice act. Never in the history of medical legislation have there been so many active workers in Indianapolis, and it only goes to show what the medical profession can do when it is united and puts forth active efforts in behalf of sane and needed legislation for the protection of the health of the people.

#### THE AMERICAN MEDICAL ASSOCIATION

This year's session of the American Medical Association is to be held in Washington, D. C., on May 16th to 20th. The indications are that there will be a very large attendance, and Washington is prepared to take care of all who come and in a manner that will be perfectly satisfactory to all concerned. Programs of exceptional merit have been prepared for all of the various sections, and the local committee on arrangements has worked hard to provide not only facilities for the comfort and convenience of all who will attend, but have provided entertainment that will make the session one exceedingly enjoyable to all from a social standpoint. A special feature will be the clinics, arranged under the auspices of the board of trustees. Washington not only is the most beautiful city on the American continent, but it is the capitol of the Nation and contains many interesting places for visit, with unusual opportunities for educational entertainment

through visits to the various museums, galleries, public buildings, the congressional library, the Reed Memorial Hospital, and numerous other places sustained by the government. While Washington is prepared to take care of a large number of visitors, yet it will be a wise move if those who expect to attend the annual session of the A. M. A., will write at once for their hotel accommodations. The railroads have offered a reduced rate, one and one-half fare for a return ticket on the certificate plan, but in order to take advantage of such rates it will be necessary to secure the certificate from the agent when the tickets to Washington are purchased. These certificates must be stamped by the secretary and validated by an agent of the railroad before the return tickets at one-half fare can be secured. As usual, Indiana will send a large delegation, and several of our well known Indiana men are on the program, either for papers or discussions.

### COLLECTION AGENCIES

An Indiana doctor writes us concerning unfortunate and costly experiences with a collection agency. Time and again we have had occasion to caution medical men concerning the unreliability and untrustworthiness of the average collection agency. Why will Indiana doctors continue to patronize concerns which upon investigation oftentimes can be proved to be thoroughly irresponsible. Most collection agencies are guilty of unfair and not infrequently fraudulent practices. The doctor who uses any kind of sensible system for the collection of accounts can accomplish far more than any collection agency and with less friction. If he is too busy or does not have the inclination to do his own collecting, he will be wise if he places his collection work in the hands of a bright office girl, or trusts it to some deserving young man who may be induced to take collections on a commission basis. When all is said and done, the wise doctor is the one who presents his bill on the first of every month. Prompt payment makes good friends, and seldom does undue leniency pay. Furthermore, the slow-paying patient can be reached with more satisfaction by the personal visit of a collector than by any amount of correspondence, and the visit of a collector will bring results from anything but the most hardened dead-beat, and no one can reach the latter. Probably the majority of people pay the doctor last, but through effort they can be made to pay their doctor bills just as promptly as they pay any other bills. The wise and successful doctor is the one who extends leniency where indicated, even to the point of donating his services, but who adopts ordinary good business principles in expecting prompt and full payment from those who are able to pay. As a general proposition no agency can collect more accounts than the doctors themselves if the latter adopt business methods. What the agency can do is collect collectible ac-

counts, charge an outrageous commission for the service, and is very successful in building up a lot of enmity for the physician.

### MEDICAL CHARITY

In an editorial entitled "The Sad Plight of Doctors," the *Indianapolis Star* calls attention to statistics published in *Scribner's Magazine*, in which the average annual income of the American city doctor in 1919 is given as \$1,200. Attention is then called to the old saying that, in time of need the doctor is the first one to be called and the last to be paid, if he is ever paid, and that many doctors have to compete with dispensaries which are patronized by people who can afford to pay but accept the gratuitous services so easily secured and so readily given. Concerning this latter feature, it is said that it is an every day occurrence in the larger cities to see patients come to the clinics in fur coats and other finery, and many driving up in taxicabs. Those who come in their own cars are apt to park the cars around the corner. Many of these patients who take advantage of free clinics know that they are perpetrating a fraud, and yet they ease their consciences by believing, perhaps vaguely, that somebody is paying the doctors, which of course is not the case. The editorial closes with the suggestion that medical colleges should pay more attention to the business end of the practice of medicine, and teach their students something about fees and the methods of attracting a clientele. By inference it also is indicated that doctors as a class are not business men, and that they would be better off financially if they adopted business methods in the practice of medicine. With equal justice it may be said that some method should be adopted whereby the free clinics cease to render services to those able to pay. The all too common habit of accepting the statement of patients concerning his or her financial circumstances should be abolished. The financial status of the patient should be determined in an unbiased manner before the patient is accepted as a charity patient. Likewise, the busy private practitioner should be guarded in his donation of services to those who claim to be too poor to pay anything except a very moderate fee, or perhaps no fee at all, though in reality able to provide themselves with all sorts of expensive luxuries. In the final analysis the whole subject simmers down to a question of getting the medical profession, individually and collectively, to do away with promiscuous, unnecessary and undeserved medical charity.

### CHRISTIAN SCIENCE

We seem to be selected quite frequently for an epistle from the Christian Science Committee on Publication, with the request that their communications be published in the columns of *THE JOURNAL*. Recently such an epistle has come to us, apparently as a direct result of exceptions



taken to some of the editorial notes appearing in the November number of *THE JOURNAL*. For once we are going to vary the routine and publish this communication, together with our answer thereto. We have added numbers to the paragraphs in the communication by way of identification. The communication is as follows:

To The Editor of *THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION*:

In your November issue there were a number of misrepresentative and untrue statements pertaining to Christian Science, and this letter is to ask that they be corrected.

1. The statement that "our public schools are honeycombed with teachers who are spreading vicious propaganda in the interests of the Christian Scientists" is not only erroneous but deceptive, and it is safe to assert that its author knows this. It is contrary to the policy of the Christian Science Church to indulge in such practices and the allegation cannot be substantiated.

2. The assumption that Christian Scientists are opposing medical doctors, or that Christian Science is in any way competing with the medical profession is unwarranted, and is not borne out by the facts. Christian Science is a religion. Its healing of the sick is the result of its religious practices. Necessarily, in that which is wholly religious there could be no element of competition with a secular profession such as the practice of material medicine.

3. The allegation that Christian Scientists are guilty of criminal negligence in the care of the sick is ridiculous. The mere fact that a patient has been visited by a medical doctor, regardless of his ability or character, is no indication of the proper care of the patient nor of the absence of neglect. On the other hand, the assumption that the act of having Christian Science treatment in itself constitutes neglect, if not induced by personal prejudice, is based on ignorance of the practices of Christian Science. The truth is, Christian Scientists do not neglect the sick. The Christian Science organization would not countenance any such negligence. It would be the first to correct such a situation and to see that there was no repetition of it. That church should not be condemned for any isolated case unknown to it any more than the medical profession would be for the cases of palpable neglect that have been known to occur in the practice of individual physicians.

4. The unreasonable and combative spirit of your magazine toward Christian Science should cease. If you and your organization will lay aside prejudice and intolerance and face the matter fairly and honestly you will discern that you have long been laboring under a misapprehension, and have been misrepresenting an organization whose sole mission is to do good and which has never attempted to injure the medical profession or obstruct its practice.

Yours sincerely,

CHARLES W. HALE,

Christian Science Committee on Publication.

ANSWER:

1. There is nothing erroneous or deceptive in the statement that our public schools are honeycombed with teachers who are spreading vicious propaganda in the interests of Christian Scientists. No matter what the policy of the Christian Science church may be, there are followers of the Christian Science faith who are attempting to influence patrons of the public schools to follow Christian Science teaching in its relation to illness, and, in particular, communicable diseases. It is such influence that hampers our medical school officers in

securing the best results from vaccination as a preventive of smallpox, diphtheria and other communicable diseases and hinders the recognition and treatment of communicable diseases when Christian Scientists preach that disease is a figment of the imagination or if present is amenable to Christian Science hocus-pocus. If necessary, we will furnish names and dates, and we believe that any medical school officer in the state of Indiana also can furnish an abundance of evidence to prove our contention.

2. We never have assumed nor insinuated that Christian Scientists are "competing with the medical profession," nor have we charged that they are "opposing medical doctors" except as Christian Scientists attempt to influence the sick and suffering to refuse to seek or accept services at the hands of reputable, educated and trained medical men.

3. The allegation that Christian Scientists are guilty of criminal negligence in the care of the sick is not ridiculous, but can be substantiated by innumerable instances. The number of preventable deaths from diphtheria and other communicable diseases that reasonably can be charged to Christian Science ministration, which in the final analysis is equivalent to criminal neglect, is very large, counting only the cases that are recorded. Here it may be stated that Christian Scientists are very clever in covering up the results of their negligence and a death is hidden under the death certificate signed conveniently by a physician or coroner who perhaps never saw the deceased alive.

Within the last few months a child died from diphtheria in the city of Fort Wayne after having received no other attention than that administered by a Christian Scientist. About the same time another child, in the same locality, nearly lost its life from diphtheria, and was saved only by prompt action on the part of the health officer who administered antitoxin. The value of antitoxin in the prevention and cure of diphtheria is established. It is an incontrovertible fact, known all over the civilized world. In the face of this knowledge, we claim that it is criminal negligence on the part of any parent or individual if a child having no voice in the matter is permitted to suffer from diphtheria and finally lose its life as a direct result of not having the advantage of a known curative remedy.

We are not "ignorant concerning the practices of Christian Science," for we know of innumerable instances where Christian Science practice consisted in denying the patient the advantages that would have come from scientific care on the part of trained medical men.

That countless, needless deaths have occurred as a direct result of Christian Science ministrations which, in effect, are nothing more than neglect, can be proved to any rational-minded individual. The morbidity and mortality rate in communicable diseases has been decidedly reduced

as a direct result of scientific advancement in the recognition of the cause and treatment of those diseases. Much of the morbidity and mortality that does occur in communicable diseases can be traced to either unscientific treatment, or such neglect of treatment as follows the ministrations of Christian Scientists. As a concrete example of this, we need only point to the diphtheria deaths heretofore referred to, and to others that would swell the number to considerable proportions.

4. Our criticism of Christian Science and its practices is based upon the knowledge that Christian Science is neither Christian nor Science, and its teachings and practices, insofar as pertaining to the relief or cure of disease, is for the most part exceedingly dangerous. When applied to communicable diseases it is positively criminal, and doubly so when it is forced upon innocent and helpless children who have no voice in the matter. We have no quarrel with the individual who, apparently in his right mind and of legal age, elects to place himself in the hands of a Christian Science practitioner for the relief of any disease whether communicable or not, providing he does not endanger others by so doing, but we do object to forcing Christian Science ministrations upon those who cannot help themselves. Christian Science may be termed by some a religion, but as a religion it has to account for many needless deaths. It was religion that at one time resulted in people being burned at the stake. It is the so-called "religion" of the Christian Scientists that results in deaths that are comparable to being burned at the stake.

Neither the editor of *THE JOURNAL* nor any member of the Indiana State Medical Association is laboring under any misapprehension as to what Christian Science is and what injury it is doing to many sick sufferers. It is one of the greatest delusions of the age. To many it is a deception that helps to promote suffering and even death. Many of the Christian Science adherents are honest adherents to the fallacious teachings that have been handed down, with some modification, from Mrs. Eddy. Others are hypocritical in that they profess to be Christian Scientists and yet do not follow the teachings. As much may be said for the followers of some other religions, so that should not be charged up against the sect. However, insofar as Christian Science interferes with or prevents giving the sick and suffering the advantage of the proven facts concerning the prevention and cure of disease, it is a dangerous sect and its efforts to place its teachings and ministrations ahead of scientific facts should be suppressed in the interests of public welfare. Christian Science followers never yet have put their theories and practices to a test to prove the claims they put forth. Until they furnish proofs satisfactory to unbiased minds, they must expect to find educated and trained medical men opposing them, not because Christian Scientists offer any competition for the medical profession but because they are

deceiving a certain proportion of the public through their specious argument, and through the practice of their beliefs are promoting the spread of communicable diseases and, indirectly, aiding in the increase in the morbidity and mortality rates.

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## EDITORIAL NOTES

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DEAR DOCTOR:

*THE JOURNAL* and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in *THE JOURNAL*, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask *THE JOURNAL* about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want *THE JOURNAL* to serve you.

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ONE of our exchanges says that the man who today does not read the advertisements in any magazine he buys is cheating himself. To this we say, "Amen."

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As Tom Hendricks well says, "The several hundred Indiana doctors who left their practices and went to Indianapolis to help in the legislative fight for a new medical practice act deserve great credit and the thanks of not only the profession but the communities in which they live." It is a wonderful expression of confidence in our legislative program.

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*THE Medical Credit Association of America, Inc.*, with head offices at New York City, is asking physicians to become members, and requesting the payment of fifty dollars for a life membership certificate. Investigation shows that the enterprise has a questionable reputation. Therefore, doctors will be wise if they turn down the offer. At least they will be better off by fifty dollars.

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SOME physicians are ignorant of facts that they should know and they make no effort to learn. They need our medical societies and our post-graduate courses, but it is such men that usually steer clear of the aids that have been offered. We wish we could put a charge of dynamite underneath them and stir them to action for their own good as well as the benefit that would accrue to their patients.

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STATISTICS indicate that the people of New Zealand come nearer the attainment of perfect health than the inhabitants of any other country. Primarily this is brought about by a healthful climate and a tendency of the people to live much in the open, but no less important are the national



safeguards of health as brought into play by the enforcement of wise laws pertaining to public health and sanitation.

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The editor of *THE JOURNAL* was in Europe during the time that Indiana medical men were fighting to prevent the chiropractors and other medical pretenders from securing legal recognition, and so missed the pleasure of taking part in the "scrap," but he feels very proud of the fact that medical men from every section of the state worked so determinedly and successfully to secure an improvement in the law governing medical licensure.

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A WELL known ear specialist says that, in general, incision of the ear drum is not an operation for the general practitioner who has not had special training. Any physician can easily push the knife into the internal ear and set up a labyrinthitis. The specialist also says that it is better to lance a hundred ear drums that do not need it than to neglect one that does need it. The ear drum should be incised freely in the upper, posterior quadrant and then let alone.

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EVERY day the medical man is becoming more and more a health adviser and is consulted by the apparently well for suggestions that will promote or prolong his life. The periodic health examination is a means of putting the medical man in possession of facts that will enable him to advise intelligently. The day is coming when the medical man will feel free to notify his regular patrons concerning the time when they should come in for these periodic health examinations.

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IT is strange that so many welfare magazines of one kind or another, and especially those pertaining to health and disease in childhood, should be owned, published and controlled by laymen. It also is strange indeed that so many of the articles in these publications are by laymen, and seldom by medical men who are best qualified to speak authoritatively on the various subjects considered. It reminds us of the story of the old maid who had been a recluse all her life and yet had the nerve to write a book on the rearing and care of children.

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A WRITER in the *Wisconsin Medical Journal* says that physicians in rural communities more often undercharge than overcharge, and he remarks that doctors might as well remember that patients are prone to regard a physician at his own estimate. Among recommendations made are, first, make a fair charge for your services; second, whenever possible and deemed necessary, come to an understanding in regard to the fee and method of payment; third, send statements promptly on the first of each month; fourth, keep an accurate record of your business.

MANY may laugh at the economy program of President Coolidge, but there is one thing that should receive the approval of all taxpayers, and that is the removal of a horde of parasites from the United States payroll. Last year more than 14,000 superfluous office holders were discharged from the United States service, and we hope that this year the number will be doubled. President Coolidge also will be wise and earn the gratitude of the people if he will insist upon getting a day's work for a day's pay from every one of the vast army of office holders in Washington.

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IN this number of *THE JOURNAL* we publish a communication from Dr. J. C. Bloodgood, of the Surgical Pathological Laboratories of Johns Hopkins Hospitals, concerning tissue diagnosis in the operating room. Dr. Bloodgood is anxious to cultivate correspondence with pathologists, and surgeons interested in the immediate examination of frozen sections of tissue in the operating room and the immediate cover-slip studies of smears of all fluids and pus. The recommendation is deserving of serious consideration, not only on the part of surgeons but well equipped hospitals.

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How senseless and inconsistent it is to have a medical department in the United States Department of Labor that is entirely separated from the United States Public Health Service. Aside from the possibility of duplicating work there is the inconsistency of taking from the Public Health Service functions that rightfully belong to it. How the Department of Labor could have gotten a hold upon child welfare work, and particularly the functions of the Sheppard-Towner Act, is a conundrum that perhaps the politicians can solve, but we are unable to fathom the intricacies of political "pull."

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News comes from London that a popular belief in Wales is that rheumatism can be relieved by binding a split mackerel around the affected part. In America we use a cleaner substitute in the way of a petrified potato which should be carried in the pocket nearest to the affected part, and some even go so far as to say that a red sock, preferably one worn a week or so, will cure a rheumatic throat if wrapped around the neck. Failing in these measures, consult a chiropractor or a Christian Scientist. On the whole all of these American remedies or any one of them will be as effectual as the split mackerel.

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*THE Medical Review of Reviews* for November, 1926, wastes a whole page in printing letters from the Christian Science Committee on Publication in which the claim is made that many children as well as adults have been healed of crippled and deformed conditions through the ministrations of Christian Science. We are rather surprised that

the editor did not ask for some proof. The Christian Scientists make some very extravagant statements concerning what they can cure in the way of disease and deformity of the human body, but so far as we know they never yet have produced any proof that would be accepted by an unbiased mind.

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At the last meeting of the board of trustees of the American Medical Association, a recommendation was adopted expressing the hope that the Council of the Association would undertake to have lectures on medical ethics made a part of the curriculum in every approved medical school. The recommendation has been passed on to the various medical schools, and we sincerely hope that it will be acted upon favorably. Certainly, too little attention has been paid to this very important subject, and it is not only necessary to establish and maintain a high degree of integrity on the part of individual physicians, but the same deportment should be required of hospitals and their staffs.

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It might be a good plan for some of our American surgeons to follow a method now employed in Vienna, of using zinc oxide and paraffin dressings in fracture work. The dressings are applied after the bones are put in apposition, and subsequently the x-ray is employed to show that there has been no disturbance in the relationship of the bones as a result of the application of the bandages. Within a few days after the bandages have been applied the patient is permitted to use the affected part, and it is reported by an American surgeon, who followed the process, that excellent results are secured, and the removal of the bandages several weeks after their application found the skin unirritated and the patient highly satisfied with the comfort maintained throughout the course of treatment.

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NEVER criticize another doctor's work, even by inference, for it doesn't do you any good, and besides, you may be entirely mistaken because you are not acquainted with all of the facts in connection with the case. Furthermore, it is this criticism of fellow practitioners that leads to malpractice suits, and you may be the next fellow to suffer. This comment is suggested through a knowledge of some very unpleasant developments in connection with testimony in a malpractice suit in one of our Indiana courts. A damage suit against a physician was inspired by a jealous or quarrelsome confrere, and the testimony showed that a grudge existed. Subsequently the physician who was the cause of the trouble was himself the victim of a suit, and to use a hackneyed expression, "he got a taste of his own medicine."

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MANY county medical societies and many individual doctors rendered valiant service in con-

nection with the efforts to secure rational medical legislation during the session of our late Indiana Assembly. Our attention has been directed particularly to the correspondence and newspaper advertising sponsored by the Madison and Grant County Medical Societies, though in all probability there were other societies equally as active. The medical men in the legislature also are to be commended for their wonderful work, and, last but not least, the greatest amount of credit should go to our worthy president, Dr. Frank W. Cregor, who as chairman of the legislative committee, was the guiding spirit and who was so ably aided by that indefatigable and genial worker, our efficient executive secretary, Thomas A. Hendricks.

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We are told, though we have not verified the information, that in one of the middle western states the legislature has passed a law at the suggestion of members of the medical profession and probably with the assistance and approval of Christian Scientists and others of their class, to the effect that smallpox shall not be quarantined. In other words, the medical profession has gotten tired of telling the public how to prevent a loathsome disease, and if people desire to contract smallpox, all well enough. Let the people take the consequences and perhaps they will learn to have greater respect for vaccination. We are rather in sympathy with the movement, even though it requires the proverbial burned child in order to teach him to dread the fire. The trouble of it is the innocent have to suffer along with the guilty, and by that we mean not that patients who are vaccinated may suffer from smallpox but that they will suffer in a business way.

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ONE of Chicago's wealthy women, finding it impossible to obtain milk of good quality and low bacterial count for her child, decided to go into the dairy business herself. She now owns and manages one of the finest dairy farms in the United States and furnishes to Chicago customers a quality of milk that is not duplicated anywhere, the bacterial count of the milk being lower than the demand of the most exacting municipal milk ordinances. Furthermore, it is said that the enterprise is not a losing venture, though in explanation it should be known that the price charged for the milk from this particular dairy is slightly higher than the price of certified milk from other dairies. The enterprise is dependent not only upon good management and the selection of the best grade of cows, but upon the most exacting rules of cleanliness. The success secured can be duplicated by any other dairy that will adopt similar methods, and the public is willing to pay for quality.

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As evidenced by numerous articles that we have seen lately, our homeopathic friends still believe that there is some virtue in the so-called electronic



reactions of Abrams. They are not willing to take the verdict of the American Medical Association, nor of the *Scientific American*, a lay publication which investigated the subject from a purely scientific standpoint and emphatically stated that the so-called electronic reactions do not occur and the so-called electronic treatments are without value. Some dupes hate to admit that they have been duped. Others know that they are duped but make capital of it. We are informed that two members of our own Association living in different towns not only have used the Abrams treatment but advertise it. We honestly believe that those men know that the Abrams treatment is a fraud, but if it adds shekels to their income, they exploit it. Fortunately, the Abrams fake has had its day and it will be but a short time until we will cease hearing about it altogether.

THE secretary of a Better Business Bureau in the east sends us a clipping containing the photograph of a dimple-making device which is offered for sale to beauty specialists by a woman who styles herself "a beauty psychologist." Our friend labelled the clipping, "One is born every minute," and we undertake to say that every one that is born will bite at this alluring bait. We are not so sure that the suckers all will be of the female persuasion either, for recently we noted the advertisement of a New York beauty specialist who caters exclusively to the wants of gentlemen, and offers "hairedressing, facial massage, and the skillful use of cosmetics to those gentlemen who are particular about their personal appearance." The announcement even says that it is "the only exclusive shop where perfumes for gentlemen may be obtained." We feel that for real enjoyment we would like to hire a "bruiser" to stand outside the shop and kick into insensibility every male flapper who emerges from the doors of this men's beauty shop.

MUCH has been said about the changing ideas concerning chastity, and quite recently the members of a school debating society in Denver publicly endorsed Judge Lindsey's idea concerning trial marriage. One young woman was applauded when she announced that no young woman should have any fear concerning trial marriage with the man she loves. The female students of Drake University by poll have shown that they would change the order of the ten commandments and place adultery further down in the list. On every hand there are evidences of a looseness in the morals of the younger generation, but it is a question if this is not a natural swing of the pendulum. Many conditions and practices are tolerated because public sentiment does not rebel. When the church, our educators, and the press cries out with sufficient emphasis, then and then only will there occur a change in our present

accepted code of morals. In reality we probably shall have to grow worse before we can grow better if we follow the course of the pendulum.

THE Indianapolis Medical Society has adopted unanimously a report which endorses the plan and operation of the Medical Arts Credit Bureau, an Indianapolis institution operated exclusively for the medical and allied professions. Summing up the recommendation, the committee says that it is the first time in the history of the medical profession of Indianapolis that a real ethical business service has been created for the profession. The bureau will furnish credit data concerning the paying habits of patients, collect accounts for professional services rendered, maintain a telephone exchange with operators on duty all hours of the day and night, maintain a nurses' registry and ambulance service, furnish clerical help for physicians' offices, finance hospitals and medical fees for worthy patients if recommended by members of the bureau, and in fact attend to any of the thoroughly business affairs of the members of the profession. It is expected that in the course of time branches of this organization will be established in other cities throughout the state.

BERNARR MACFADDEN, who is exploiting the physical culture stuff and fighting the medical profession and the American Medical Association in particular, quotes the *Journal of the Indiana State Medical Association* concerning the fact that physicians as a class are not submitting themselves to periodic examination as recommended to their patients. The point is made that "doctors refuse to take their own medicine," and that the one and only thing that actuates them in recommending periodic examination is the greed for gold. Macfadden loses sight of the fact that practically all of the recommendations of medical men concerning individual and community health have a tendency to cut down the income of the medical profession. We admit that doctors as a rule may be neglecting to adopt periodic examination of themselves, but if they do so it is because they are too busy looking after the welfare of others. Furthermore, as much of the work connected with periodic physical examination is done without compensation, it is false argument to say that the doctors are interested primarily for the income derived. Macfadden, the rank commercialist, is unable to recognize altruism or humanitarian motives in others.

DESPITE the fact that we have had some uncomplimentary things to say concerning Dr. Paul O. Sampson, vice-president of the National Health League, and that the Bureau of Investigation of the American Medical Association does not give the aforesaid gentleman a clean bill of health, we note that Sampson has been rather successful in thrusting himself upon the various

dinner clubs throughout Indiana. His principal function seems to be to deliver an address upon the "Joy of Eating," in which he does not hesitate to pour into the ears of his listeners some flowery commercial propaganda concerning diet and food. After the warning has been sounded we wonder just what the doctors who are members of these various dinner clubs before which Sampson has appeared, have been doing in permitting such outrages upon decency and fair play. Certainly the doctors of Indiana ought to have some influence in various organizations like Rotary, Kiwanis, Lions, Optimists, etc. Sampson made application for a speaking date with some Indiana clubs whose secretaries inquired of the secretary of our State Medical Association as to Sampson's qualifications. Needless to say, Sampson did not appear before those clubs.

FROM what we believe to be a reliable source of information, we learn that two rabid anti-vaccinationists contracted smallpox during a smallpox epidemic in one of the counties of Indiana where the disease was especially prevalent a few weeks ago. Perhaps it is unkind and uncharitable to gloat over the misfortunes of any of our fellow-beings, but in reality we can chuckle with glee to think that some of the know-it-all obstructionists and opposers of scientific medicine have had to suffer as a direct result of obstinacy in acknowledging belief in demonstrable scientific facts. If anti-vaccinationists were the only ones to suffer as the result of the propaganda that is circulated against vaccination as a preventive of smallpox, no objection would be raised to the tirades that these obstructionists put out. However, the ignorant and oftentimes the poor are inclined to be credulous and therefore are willing to believe the fallacious argument put forth by those who oppose vaccination, and when smallpox comes around, as it often does in various communities, those who have listened to the specious pleas of the anti-vaccinationists are the ones who most often have to suffer and sometimes innocently. It is to protect the innocents that we should hang the guilty.

A READER of THE JOURNAL sends us some circulars in which a New York concern guarantees rejuvenation in thirty days through the use of the "Radiendocrinator," costing \$150, which is said "to give out the pure gamma rays known to possess wonderful rejuvenating powers." The circular ends by advising all those who have lost their physical, mental and sexual energies to begin, without one more day of delay, in an effort to regain the greatest renewal of rightful energy, youthful looks and buoyant spirit, and ends with the significant statement, "Yours for love, laughter and romance." Of course, there will be a lot of old human goats who will bite at this bait and send \$150, or even twice that amount to any

firm of exploiters who will give even the faintest promise of renewal of sexual vigor. We sometimes think that such old fools deserve to be swindled, and yet it is a deplorable state of affairs when any individual or company is permitted to swindle a gullible public so easily. Aside from a lottery with no winning numbers there is nothing so profitable as rejuvenation schemes, and rejuvenating swindles will exist as long as old and worn out males seek to cultivate sexual urge and continue "to look," especially when the looking is as good as it now in this year 1927.

SEVERAL prominent members of the Indiana State Medical Association are having controversies or even trouble with collection agencies. We have been furnished copies of the correspondence that has passed between the disputing parties, and are inclined to believe that in one or two instances the doctors are at fault inasmuch as they foolishly signed contracts without first determining their unreasonable and unfair conditions. In one instance, a dispute with the World's Bonded Adjusters, represented by Paul F. Compart, their attorney, the doctor is treated to a threatening and impudent letter concerning commission on the doctor's collection of an account, the very small amount in question being, the doctor says, in excess of any collections made by him. The other controversy, with the United States National Adjusting Company, it seems to us, is purely a question of foolishness in signing an exacting contract. However, as we often have said, why do doctors patronize these collection agencies having offices at a distance, and why do doctors, under any consideration, sign exacting contracts covering collection of accounts? There isn't one collection agency in ten that is on the square, and it is a rare instance when the doctor can pick out the trustworthy concern. Finally, why patronize a collection agency anyway?

A NEW YORK specialist presented a patient before the New York Academy of Medicine who can speak, sing and hum without the use of the vocal cords. The patient was presented as a demonstration of the claim that speaking, singing and humming are possible without the co-operation of the vocal cords, and that, contrary to prevailing opinions, the pitch of the voice can be produced by the vibration generated in the different spaces above the larynx through their adjustment to larger or smaller dimensions without the vibrations of the vocal cords. The patient presented was a man of middle age who constantly wears an adult size intubation tube, filling the entire larynx, who cannot therefore, in any way, use the vocal cords, since not only does the tube press on the cords, but the air passing through it escapes above the vocal cords and they therefore cannot produce vibrations below that level. It also was pointed out that, owing to the fact that the tube is much smaller in



trachea and laryngeal cavities, even the amount of breath which can pass through it is considerably less than normal. The demonstration seemed to point to the fact that scientists should direct more attention to other organs of speech as factors in voice production, namely, to the organs of articulation and to the resonating chambers. Their adjustment, together with those of the different spaces of the vocal apparatus above the larynx, in voice production and determination of pitch, is of far greater importance than has been suspected.

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WILL ROGERS, the humorist, has returned from an extended visit in Europe where he was entertained by prominent people of many stations in life, including royalty. He says that in all the countries visited he was treated with the utmost deference and kindness by officials, even though on the whole Europeans do not like citizens of the United States. He says further that if you want to know what real trouble is you must attempt to get out of or back into the United States, and in that manner come in contact with some of the officials of this country. To get a passport requires an endless amount of trouble and sometimes considerable expense, and when arriving in this country from any foreign land our officials can and oftentimes do put the weary traveler through an experience that will try the patience of a saint. Exactions are necessary as a matter of protection, and it is quite possible that there are many persons who would take advantage of the slightest loophole, but like Rogers we feel that in not a few instances the exactions are too severe and superfluous and that the enforcement of rules and regulations is without even ordinary courtesy. However, when all is said and done we surely are willing to admit that living in the United States is far preferable to living in any foreign country that the sun ever shone upon, so perhaps we should be quite willing to pay for the many and vexatious exactions when desirous of leaving the country temporarily and finally getting back into it.

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WE understand that an effort is to be made to secure members for the American Association for Medical Progress, and we urge the reputable medical men of Indiana to promote the effort that will be put forth. The American Association for Medical Progress is an organization made up largely of intelligent laymen and conducted with the praiseworthy purpose of making suitable facts about the promoting of health, the prevention and treatment of disease and in general the methods, purposes and practices of educated physicians better and more widely understood, and to assist in combating the effect of ignorance and the activity of quacks, cultists and medical pretenders of all classes in their efforts to capitalize sickness to their own advantage.

Concisely stated, the aims of the association, as given in a recent number of *California and West-*

*ern Medicine*, are as follows: First, to encourage and aid all research and human experimentation for the advancement of medical science; second, to inform the public of the truth concerning the value of scientific medicine to humanity and to animals; third, to resist the efforts of the ignorant or fanatical persons or societies constantly urging legislation dangerous to the health and well being of the American people.

Surely such an organization deserves the encouragement and support not only of the lay public but the medical profession as well, and we bespeak for the organizer of this state a hearty welcome.

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PRESIDENT COOLIDGE has become noted for his "White House breakfast" to which he invites senators and representatives, presumably with the idea of securing political opinions that will help him in the formation of policies. The essential part of the breakfast consists of sausages and wheat cakes, with an abundance of Vermont maple syrup for the latter. Recently Senator Copeland, known for his medical advice as given so freely in health talks published in the lay press, was a guest at one of the President's breakfasts, and immediately thereafter it was announced that the character of the breakfast would be changed by substituting ham for sausage on account of the fattening properties of the latter. It is quite possible that a little more fat on the president would do no harm, though the warning sounded seems to have been heeded. However, the announcement of the change has started a controversy among chefs, with the opinion prevailing that the President has not improved conditions by changing the menu of the White House breakfasts. One public health official says that the President would have shown more sound judgment if he had decided, as steady diet, to stick to something like fruit, a cereal and a cup of coffee, with an egg thrown in occasionally. Sausage and ham may be all right as steady breakfast diet for a man doing hard physical labor, but for the past middle-aged professional man or statesman who lives a more or less sedentary life, it is a little hard on his system.

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ONE of the large life insurance companies of this country wrote a letter to a very prominent member of the Indiana State Medical Association advising him that they had recommended one of their policy holders to call upon him for a physical examination, and that a suitable fee would be tendered for the services rendered. A form indicating the character of the examination desired was inclosed in the letter, and the statement was made that the policy holder had been sent a check for two dollars to cover the fee for the examination. Even a brief inspection of the form indicates that a very exhaustive physical examination is required, and that if the work is done well it would require at least an hour, to

say nothing of the time required to fill in the blanks and the training and skill required to make a trustworthy examination. The doctor replied to the request by saying that he considered such an examination as required to be worth anywhere from ten to fifteen dollars, at a low estimate, and that under no consideration would he do the work for the compensation offered. He also very properly informed the company that whenever any doctor attempts to make a thorough physical examination for two dollars it is a safe bet that the examination is superficial and not trustworthy, consequently not even worth the price paid. The query is then put as to how many medical men of Indiana are accepting these paltry fees from the rich and powerful insurance companies that attempt to dictate fees for the highest class of skilled work. Verily, a sucker is born every minute, though some minutes two suckers are born, both of whom are doctors. We hope that there are many other medical men who will have the decency and self-respect to refuse the paltry fees offered by some insurance companies.

THE king and queen of England have announced that they do not like either bobbed hair or excessively short skirts, and as the royal displeasure has much to do with the styles in England it is quite likely that there will be a scramble among English women to comply with royal taste. As another straw in the way the wind is blowing, it is announced from Paris that the new styles for fall and winter will require the wearing of wigs unless by chance there is a female head that has not been mutilated by a "bob." Of course, women will follow the edict like a flock of sheep follows the leader, for no woman will willfully be out of style. So much for a fashion that was heralded as hygienic, economical and beautifying. Pshaw! What's the use of talking about anything consistent and rational to the average woman if the argument is counter to prevailing style. A few years ago when it was advocated that the women keep their dresses off the ground as a hygienic measure, who would have thought that the recommendation would go to the extreme in this year 1927, and many women would unblushingly display the whole leg and a part of the thigh to the public gaze. Skirts clearing the ground were welcomed in the interest of health, hygiene and good sense, but we got them only when STYLE and not common sense dictated, and we got them short with a vengeance as any one may observe by watching the leg show on any boulevard and particularly in any public conveyance. We got bobbed hair, not because it is hygienic and healthful, but because it is STYLE, and now we are about to have long hair again for the same reason. Likewise skirts are either going down or up still more, all for STYLE. The vagaries of the ordinary woman are past understanding, but bless the dear women, we love them just the same, though

we would like to see them a little more consistent and rational in the matter of dress!

A PROMINENT practitioner in one of the larger cities of Indiana says that while we are finding fault with members of the medical profession for dereliction of duty and especially carelessness in routine work, we ought to say something about the habit of many doctors of passing an opinion concerning the condition of the lungs after a very superficial examination which has been made without stripping the patient or even putting the stethoscope on the skin. As a concrete example he reports having seen a woman suffering from pulmonary tuberculosis who went to three different prominent physicians of her home town for examination of the lungs, and in every instance the examination was made through the clothing, and she was assured that there was nothing the matter with her lungs and that she had no cause for alarm. This seems like an overdrawn case, and yet we have reason to believe that it is not uncommon. If there is any one sin of omission in connection with the average doctor's work it is a hurried and superficial examination that he makes, and general lack of thoroughness. In a few instances this is due to pure laziness, sometimes to incompetency, and occasionally to the belief that the patient will not pay an adequate fee for the unusual time that may be required to be thorough in carrying out all the details of an examination that are required in order to be thoroughly familiar with some obscure trouble.

There are two solutions to this problem. First, a doctor should realize that his own reputation for ability as well as honesty is at stake, and he should take sufficient time to be thoroughly familiar with the condition upon which he is called to pass an opinion or to treat. Second, the public should be taught to appreciate thorough and trustworthy service, and be willing to pay adequately for it. On the other hand, the physician should give value received for everything that is paid him.

FRANK W. FOXWORTHY, formerly of Indianapolis, but now residing in Miami, Florida, in a communication printed in *Medical Insurance*, for January, says that he doesn't feel that any apology is necessary for booming Florida, and the reasons that he gives, in brief, are as follows:

The climate is ideal. Almost daily sunshine is the rule. Storms occur at a season of the year when people are very apt to be in a northern climate, but even damaging storms are the exception, notwithstanding reports to the contrary. The recent tropical hurricane would have caused little damage and few deaths if the houses had been built right. There were too many buildings put up hurriedly and cheaply in order to meet the requirements of the boom. However, immediately after the storm the sun came out in all its glory



and seemed to sterilize every bit of infection to such an extent that with the assistance of vaccines and the boiling of drinking water, no case of typhoid fever, diphtheria or dysentery developed. Dr. Foxworthy says that any diseases that are benefitted by the light of the sun or by elimination which in Florida is excessive, or by rest in a warm climate, will be benefitted. It is his experience that cardio-renal cases do better there than any other place in the United States. Arthritis cases have benefitted because of the lack of sudden changes of temperature. Originally, he went to Florida on account of sciatica and found relief. However, he does not think that climate will cure neuritis that is due to focal infection. Many other diseases are improved as much as the cardio-renal disturbances. The sequellæ from influenza are almost universally completely cured without any medication, and sinus infection usually leaves a person within a few days after his arrival in Miami. Bronchitis and tuberculosis have shown marvelous results through climatic treatment, and the reason for this is supposed to be the beneficial effects of sun baths taken daily and combined with the rest cure and proper feeding. Infectious diseases such as smallpox and typhoid fever are almost unknown. In short, the beneficial effects in the treatment of any diseases can be attributed to the sun rays for which Florida is noted. There is no shortage of physicians in Miami such as existed a year or two ago, and the State Board of Medical Registration and Examination is making special effort to admit only well-qualified men.

IN "The Future of Medicine" by George E. Vincent, president of the Rockefeller Foundation, published in the January, 1927, issue of *The Forum*, the argument is advanced that preventive medicine is the medicine of the future, and in connection with his argument he has this significant thing to say:

"The change of emphasis from cure to prevention has caught the doctors napping. The average physician is ill prepared to make the periodic health examination and to give the advice about personal hygiene which the new regime demands; he has been trained to look for disease rather than for health. This new hygiene takes a leaf from the care of the motor car. At the first sign of trouble automobiles are examined, readjusted and repaired. Periodic inspection of motor cars is coming into vogue. It seems only sensible to do the same thing for babies, children, men and women. Sometime physicians will receive annual retainers to keep their clients in good running order. But before this system can be efficient, medical schools will have to turn out physicians who have been taught how to do this special kind of work. The aim then is to 'permeate the medical school with the preventive idea' and to modernize the medical profession as a whole. Leading doctors recognize this need, and the American Med-

ical Association has recently issued a pamphlet of instructions on health examinations."

We regret to admit that "the medical profession has been caught napping" when it comes to the question of periodic health examination, and we may add further that it is still napping, despite all of the efforts that have been put forth by the American Medical Association and even the state medical associations to get doctors to become seriously interested in prevention work through the periodic health examinations that have been recommended so strongly on every hand. For instance, the book issued by the A. M. A. which tells how to make these physical examinations of the apparently well have been distributed far and wide, and yet we are satisfied that not one doctor out of one hundred who has received these books is seriously taking up the work or following the advice that is given. Isn't it about time for medical societies to discuss this matter seriously and make an attempt to get its members interested in the work. We are criticized, and justly so, for our apathy, and what can the public think of us when we do so little to keep up with the world's procession.

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## DEATHS

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AARON D. BOOTH, M.D., of Noblesville, died March 9th, aged seventy-eight years. He graduated from the Medical College of Ohio, Cincinnati, in 1874.

L. H. COOK, M.D., of Bluffton, died March 10th, following a long illness. Dr. Cook was seventy-one years of age. He was a member of the Wells County Medical Society, the Indiana State Medical Association, the American Medical Association and a fellow of the American College of Surgeons. He graduated from the Ohio Medical College, Cincinnati, in 1885.

DUNNING S. WILSON, M.D., until recently house physician at the French Lick Springs Hotel, was killed in a motor accident at Havana, Cuba, February 6. Dr. Wilson was fifty-one years of age. He was a member of the Orange County Medical Society, the Indiana State Medical Association and a fellow of the American Medical Association. He graduated from the University of Louisville School of Medicine, Louisville, Kentucky, in 1899.

W. T. LAMPTON, M.D., for thirty years a practicing physician at Milroy, died at a Martinsville sanitarium March 3rd, following a long illness. Dr. Lampton was seventy-one years of age. He was a member of the Rush County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the University of Louisville School of Medicine, Louisville, Kentucky, in 1880.

GEORGE C. WOOD, M.D., of Windfall, died February 28th, aged seventy-five years. Dr. Wood graduated from the Medical College of Indiana, Indianapolis, in 1881.

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### NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

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DR. AND MRS. ALBERT E. BULSON, JR., of Fort Wayne, returned April 1st from an extended trip abroad.

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DR. A. B. CRAY, of Monticello, who has been ill for several months, has sufficiently recovered to resume his practice.

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DR. SIMON P. SCHERER, of the New Highland Sanitarium, Martinsville, Indiana, has recently moved his clinic into the new fireproof annex, just completed,

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THE Sixth Clinical European Tour, arranged by the Surgical Club, will sail June 29th, 1927. For details write to J. L. Smith, M.D., 2312 North Sawyer Avenue, Chicago.

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THE Chicago Ophthalmological Society and the Chicago Otolaryngological Society held a joint meeting and clinic April 4th and 5th, with headquarters at the Hotel Sherman.

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THE March meeting of the Madison County Medical Society was held at Alexandria, March 15th. Dr. C. L. Rudesill, of Indianapolis, presented a paper, his subject being "Peptic Ulcer."

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THE New England branch of the American Urological Association held its fiftieth meeting March 1, 1927. Dr. Homer G. Hamer presented a paper on "Enlarged Pyelotomy Incisions for Renal Stones."

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THE February meeting of the Grant County Medical Society was held at the Spencer Hotel, March 15th. Drs. Frank W. Cregor and Frank M. Gastineau, of Indianapolis, conducted a dermatological clinic.

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AT the February meeting of the members of the St. Joseph County Medical Society, held in South Bend, Dr. Max Peet, of the University of Michigan, gave an illustrated talk on "Diagnosis and Treatment of Pituitary Tumors."

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THE National Association for the Study of Epilepsy will hold its next annual meeting at Cincinnati, Ohio, on May 30th and 31st, 1927, immediately preceding and in joint session with the American Psychiatric Association.

DR. THOMAS J. BEASLEY, of Indianapolis, addressed the members of the Miami County Medical Society at a joint meeting of the doctors and dentists of Peru, March 25th. His subject was, "Ideals of the Medical Profession."

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DR. ROBERT A. MILLIKEN, of Indianapolis, has been spending the last two years in post-graduate orthopedic work in Boston. His plans will keep him there a few months longer, when he expects to take up the practice of orthopedics in Indianapolis.

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A MEETING of the Fort Wayne district of the Indiana State Nurses' Association was held March 12th at the St. Joseph's Hospital. Miss Anna Holtman, president of the Indiana State Nurses' Association, presided at the meeting. Dr. H. O. Bruggeman, of Fort Wayne, presented a paper on "Group Nursing."

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THE Wayne-Union County Medical Society held a meeting at the Arlington Hotel, Richmond, April 7. Dr. Julius M. Rogoff of the Department of Experimental Medicine, Western Reserve University, Cleveland, Ohio, addressed the society on "Endocrine Glands and Rational Treatment of their Dystrophies."

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DR. E. K. WESTHAFFER, for many years a practicing physician of New Castle, has entered the United States Public Health Service and will be temporarily located at Staten Island. Dr. B. L. Harrison, of Indianapolis, has purchased the equipment of Dr. Westhafer and will take up the practice of medicine in New Castle.

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DR. AND MRS. WILLIAM H. FOREMAN, of Indianapolis, and Bishop Frederick D. Leete, bishop of the Indiana Area of the Methodist Church, and Mrs. Leete, left Indianapolis March 9th for an extended trip abroad. Considerable time will be spent in the Holy Land, Egypt, and Asia, and the party will return home about July 1st.

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THE Illinois State Medical Society is running a special train to Washington, D. C., over the Pennsylvania railroad for the A. M. A. meeting in May. Chicago will be the transfer terminal for physicians from Indiana. All inquiries should be addressed to Mr. W. E. Blachley, Division Passenger Agent, Room 524, Union Station, Chicago.

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THE March meeting of the Grant County Medical Society was held at the Spencer Hotel, Marion, March 29th. Papers were presented by Drs. H. R. Goldthwaite, H. E. List, and W. A. Fankboner. On April 1st, a special meeting of the society was held. Dr. Sherman Davis, of Anderson, presented a paper on "Diet." This was a combined meeting of physicians and dentists.



At the district meeting of the American College of Surgeons held recently in Dayton, Ohio, committees were selected to direct the work of organization in their states. For Indiana the committeemen named were Dr. George F. Holland, Bloomington, chairman; Dr. Frank S. Crockett, of Lafayette, and Dr. Charles Mix, Muncie. This district comprises Ohio, Indiana and Kentucky.

THE United States Civil Service Commission announces open competitive examination for Junior Medical Officer (interne). Examination is to fill vacancies in United States Veterans' Bureau Hospitals throughout the United States, and in positions requiring similar qualifications. Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C.

THE Eleventh Indiana Councilor District Medical Association will hold its next meeting in Logansport, May 19. There will be a clinic in the forenoon, at Longcliff State Hospital, followed by a luncheon. Dr. John A. McDonald, of Indianapolis, will present the subject, "Sub-diaphragmatic Abscess," and Dr. E. H. Falls, of Chicago University College of Medicine, will present a paper on "Management of Occiput Posterior." There will be a banquet in the evening, followed by entertainment.

THE Fifty-Fourth Annual Meeting of the Northern Tri-State Medical Association was held at the Spaulding Hotel, Michigan City, April 12th. Clinics were presented by Professor J. H. Andries, of the Detroit Medical College; Dean Charles P. Emerson, of the Indiana University School of Medicine; Professor Charles L. Mix, of Loyola University, Chicago; Professor Charles A. Elliott, of Northwestern University School of Medicine and Dr. Kellogg Speed, associate professor of surgery, Rush Medical College. The clinics were held in the forenoon at the Clinic Hospital. At the afternoon session papers were presented by Dr. J. H. J. Upham, professor of medicine, Ohio State University; Dean Charles P. Emerson, of Indiana University, and Dr. Preston M. Hickey, professor of roentgenology, University of Michigan. Following a banquet, Dr. Frank Smithies, of the University of Illinois, presented a paper.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Eli Lilly & Co.:

Ricinoleated Antigen, Scarlet Fever, Immunizing-Lilly.

National Aniline & Chemical Co.:

Tablets Gentian Violet Medicinal-"National", 0.0324 Gm. ( $\frac{1}{2}$  grain).

Enteric Coated Tablets Gentian Violet Medicinal-"National", 0.0324 Gm. ( $\frac{1}{2}$  grain).

Parke, Davis & Co.:

Glaseptic Ampoules Sodium Cacodylate-P. D. & Co.

Glaseptic Ampoules Sodium Cacodylate-P. D. & Co., 0.5 Gm. ( $\frac{3}{4}$  grain), 1 cc.

Glaseptic Ampoules Sodium Cacodylate-P. D. & Co., 0.10 Gm. ( $1\frac{1}{2}$  grains), 1 cc.

Glaseptic Ampoules Sodium Cacodylate-P. D. & Co., 0.13 Gm. (2 grains), 1 cc.

Glaseptic Ampoules Sodium Cacodylate-P. D. & Co., 0.20 Gm. (3 grains), 1 cc.

Glaseptic Ampoules Sodium Cacodylate-P. D. & Co., 0.30 Gm. (5 grains), 1 cc.

Glaseptic Ampoules Sodium Cacodylate-P. D. & Co., 0.45 Gm. (7 grains), 1 cc.

Glaseptic Ampoules Sodium Cacodylate-P. D. & Co., 1 Gm. (15 grains), 2 cc.

Glaseptic Ampoules Sodium Cacodylate-P. D. & Co., (For Intravenous Use) 0.20 Gm. (3 grains), 5 cc.

Glaseptic Ampoules Sodium Cacodylate-P. D. & Co., (For Intravenous Use) 0.45 Gm. (7 grains), 5 cc.

Glaseptic Ampoules Sodium Cacodylate-P. D. & Co., (For Intravenous Use) 1 Gm. ( $15\frac{1}{2}$  grains), 10 cc.

Swan-Meyers Co.:

Cosmos Concentrated Pollen Extract-Swan-Myers; Dandelion.

Concentrated Pollen Extract-Swan-Myers; Palmer's Amaranth.

Concentrated Pollen Extract-Swan-Myers.

The United Laboratories:

Culture Bacillus Acidophilus-United Laboratories.

Nonproprietary Articles:

Ricinoleated Scarlet Fever Antigen.

## SOCIETIES AND INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION

#### BUREAU OF PUBLICITY

January 31, 1927.

Meeting called to order at 4:45 p. m.

Present: Murray N. Hadley, M.D.; J. A. MacDonald, M.D.; and Thomas A. Hendricks.

The minutes of the meeting held January 17th read, corrected and approved.

A. L. Trester, permanent secretary of the Indiana High School Athletic Association was present at the meeting and the entire time was taken up with a discussion of plans how an intensive and scientific study might best be made into the relation of basketball tournament play upon the health of the players. During the discussion a letter was read from D. F. Smiley, M.D., medical adviser of Cornell University. This letter contains suggestions concerning various points that might be taken up in a study upon the effect of competitive basketball play upon the individual players.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole.

WM. N. WISHARD, M.D.,  
Chairman.

THOS. A. HENDRICKS,  
Secretary.

BUREAU OF PUBLICITY

March 8, 1927.

Meeting called to order at 4:45 p. m.  
Present: Wm. N. Wishard, M.D., chairman; Frank W. Cregor, president of the Association, and Thomas A. Hendricks.

The minutes of the meeting held January 31st read, corrected and approved. The following bills were approved for payment:

W. K. Stewart Co.....	\$ 6.25
Clipping Service, February.....	5.00
Clipping Service, January.....	5.00
Total .....	\$16.25

Secretary authorized to invite members of the Junior League to appear before Publicity Committee March 14th.

Physical examination blank of Indiana High School Athletic Association received. Letter received from head of the Department of Hygiene and Physical Education of Princeton University in regard to physical examination of athletes.

Letter received from secretary of the Indiana State Tuberculosis Society including clipping from *New York Evening Graphic*.

Report received of Connersville Rotary Club luncheon January 14, 1927.

Bureau completed arrangements for the following talks:

J. L. Miller, M.D., to give periodic health examination demonstration and talk before Indianapolis Medical Society March 8th.

Periodic health examination talk before Evansville Kiwanis Club arranged for March 10th.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole.

WM. N. WISHARD, M.D.,  
Chairman.  
THOS. A. HENDRICKS.  
Secretary.

BUREAU OF PUBLICITY

March 15, 1927.

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D.; Murray N. Hadley, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held March 8th read and approved.

A delegation from the Junior League of Indianapolis called upon the Bureau and presented their plans for an advertising campaign in Indianapolis to raise money to conduct the occupational therapy department at the Riley Hospital. Deciding that this is a local matter, the Bureau suggested that the group appear before the Indianapolis Medical Society.

Report received from the Evansville Kiwanis Club meeting, March 10th. The Bureau speaker gave a talk upon periodic health examinations.

Letter received from the secretary of the Miami County Medical Society requesting a speaker for March 25th.

The secretary was instructed to write letters to each of the Indianapolis physicians who had made arrangements to make physical examinations at the basketball tournament, telling them of the cancellation of this arrangement. The secretary also instructed to send a copy of this letter to the secretary of the Indiana High School Athletic Association.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole March 22, 1927.

WM. N. WISHARD,  
Chairman,  
THOS. A. HENDRICKS,  
Secretary.

BUREAU OF PUBLICITY

March 21, 1927.

Meeting called to order at 4:45 p. m.  
Present: Wm. N. Wishard, M.D.; Murray N. Hadley, M.D., and Thomas A. Hendricks, executive secretary.  
The minutes of the meeting held March 15, read and approved.

Speaker arranged for the Miami County Medical Society Friday, March 25.

Speaker assigned for meeting of Richmond Kiwanis Club for March 31, 1927.

Pamphlet received from the American Institute of Baking and secretary is instructed to review the pamphlet and make a report upon its contents at the next meeting.

Publicity article, "Attacking Health Superstitions," reviewed for release Monday, March 28.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole March 28, 1927.

WM. N. WISHARD, M.D.,  
Chairman.  
THOS. A. HENDRICKS,  
Secretary.

ADAMS COUNTY MEDICAL SOCIETY

At the regular meeting of the Adams County Medical Society March 25, 1927, the following resolution was unanimously adopted:

*Be it resolved,* That each and every member of the Adams County Medical Society feels that in the death of Dr. H. A. Duemling it has lost a most valuable friend, associate and councilor.

We know that he was not only one of the most skillful surgeons of our acquaintance but also a man of most remarkable personality and one who had the welfare of the general profession very much at heart, and we believe that the profession at large throughout Northern Indiana feels the same towards him; and feeling thus we believe that his name should be placed among those of the leaders of medicine and surgery in Indiana.

We request that our State Medical Journal publish this resolution in a conspicuous place and lend its aid in bringing about its spirit and purpose.

W. E. SMITH, M.D.

CORRESPONDENCE

TISSUE DIAGNOSIS IN THE OPERATING ROOM AND IMMEDIATE COVERS-SLIP EXAMINATIONS OF ALL FLUIDS AND PUS

Baltimore, Feb. 3, 1927.

Editor THE JOURNAL:

I will consider it a courtesy if you will publish this letter in your journal, as I am anxious to come in correspondence with pathologists and surgeons interested in the immediate examination, by frozen section, of tissue in the operating room and the immediate cover-slip studies of smears from all fluids and pus.

Microscopic examination of stained frozen sections has been possible for more than a quarter of a century. The staining of unfixed frozen sections with polychrome methylene blue and other stains is a well-established procedure. In many operating rooms in university and other large and small surgical clinics, provisions for these immediate diagnostic studies have not only been available, but have been in practical use for years. While, unfortunately on the other side, this diagnostic part of the operating room is conspicuous by its absence in many clinics.

Before 1915 it was rarely necessary for a surgeon well trained in gross pathology to need a frozen section to help him in diagnosis at the operating table. Since 1915, and especially since 1922, the public has become so enlightened that malignant disease formerly easily recognized either clinically or in the gross, now appears in our operating room devoid of its easily recognized clinical and gross appearance and can only be properly



discovered by an immediate frozen section. The majority of operating rooms are not equipped or prepared for this new diagnostic test.

The first essential part for this diagnosis is the technician—one to cut and stain the frozen section, or to make and stain the smear. The second is a pathologist trained to interpret it. It is possible for the surgeon to be all three in himself, and some young surgeons are so equipped. In others it is a dual combination—surgeon and pathologist in one, and the technician. More frequently it is three—operator, technician and pathologist. It makes little difference whether it is one, two or three individuals, providing each has the equipment and training for this most difficult diagnostic test.

In the address as chairman of the surgical section of the Southern Medical Association, I discussed biopsy, and this paper has been published in the *Southern Medical Journal* for January, 1927 (Vol. XX, page 18). A reprint of this paper will be sent to anyone on request. The chief object of this letter is to come in contact with surgeons and pathologists who are sufficiently interested in this problem to discuss it either by correspondence, or by attending a meeting in the surgical pathological laboratory of the Johns Hopkins Hospital, either the Monday before, or the Friday after the meeting of the American Medical Association in Washington.

Schools for technicians may have to be established in different sections of the country, and the surgical pathological laboratories of the medical schools and the larger surgical clinics should offer courses in this tissue diagnosis, so that surgeons may learn to become their own pathologists, or pathologists learn the particular needs of the surgeon in tissue diagnosis in the operating room.

It is quite true that when the majority of the public are fully enlightened, the surgeon will see lesions of the skin and oral cavity and the majority of subcutaneous tumors when they are so small that their complete excision is not only indicated, but possible without any mutilation. The chief danger here will be a surgical mistake—the incomplete removal of an apparently innocent tumor. There is no necessity here for biopsy. If a proper local excision is done, no matter what the microscope reveals, that local operation should be sufficient. But when lesions of the skin, oral cavity and soft parts are extensive and their complete radical removal mutilating, then there must be biopsy to establish the exact pathology.

In tumors of the breast and disease of bone, for years, the diagnosis could be made clinically, or from the gross appearances at exploration. But now, an increasing number of cases, the breast tumor must be explored, and the gross pathology of this earlier stage is not sufficiently differentiated to allow a positive diagnosis. Immediate frozen sections are essential to indicate when the complete operation should be done. The same is true of the earlier stages of lesions of bone. The x-rays no longer make a positive differentiation between many of the benign and malignant diseases, for example, sclerosing osteomyelitis and sclerosing osteosarcoma.

We must not only specialize in tissue diagnosis, but we must organize this department so it will function properly in as many operating rooms as possible in this country.

Then there is a final and most difficult question to consider. I doubt if it can be settled. What shall be done in those operating rooms in which there is no technician to make the sections and no one trained to interpret the microscopic picture? How can a piece be excised or a tumor removed, for example, from the breast, and this tissue sent to some laboratory for diagnosis without incurring the risk of the delay to the patient. I have discussed this point in my paper on biopsy.

JOSEPH COLT BLOODGOOD,  
Surgical Pathological Laboratory,  
Johns Hopkins Hospital.

## TRUTH ABOUT MEDICINES

### NEW AND NONOFFICIAL REMEDIES

**SAF-T-TOP MERCUROCHROME SOLUTION.**—An aqueous 2 per cent solution of mercurochrome-220 soluble (New and Nonofficial Remedies, 1926, p. 249) in ampules containing 2 cc. and having a capillary opening. Robert A. Bernhard, Rochester, N. Y.

**BISMUTH SALICYLATE IN OIL.**—P. D. & Co.—A suspension of bismuth salicylate U. S. P. (New and Nonofficial Remedies, 1926, p. 97) in a liquid composed of camphor, 10 per cent; creosote, 10 per cent; olive oil, 80 per cent. Each cc. contains bismuth salicylate, 0.13 Gm. (2 grains). Parke, Davis & Co., Detroit.

**GLASEPTIC AMPULES BISMUTH SALICYLATE IN OIL.**—P. D. & Co., 1 cc.—Each ampule contains 1 cc. of a suspension of bismuth salicylate U. S. P. (New and Nonofficial Remedies, 1926, p. 97) 0.13 Gm. (2 grains) in a liquid composed of camphor, 10 per cent; creosote, 10 per cent; olive oil, 80 per cent. Parke, Davis & Co., Detroit.

**CONCENTRATED POLLEN EXTRACTS—SWAN-MYERS.**—In addition to the products listed in New and Nonofficial Remedies, 1926, p. 28, the following have been accepted: Cosmos Concentrated Pollen Extract-Swan-Myers; Dandelion Concentrated Pollen Extract-Swan-Myers; Palmer's Amaranth Concentrated Pollen Extract-Swan-Myers. Swan-Myers Co., Indianapolis.

**ERYSIPELAS STREPTOCOCCUS ANTITOXIN-LILLY (CONCENTRATED GLOBULIN).**—An erysipelas streptococcus antitoxin (*Jour. A. M. A.*, August 28, 1926, p. 671) obtained by injecting horses' subcutaneously with strains of hemolytic streptococci obtained from Dr. A. R. Dochez from human cases of erysipelas lesions, bleeding the horses, and when test bleedings show the serum to have reached the desired potency, bleeding as plasma which is concentrated and refined. Marketed in syringe containers (therapeutic dose) containing 5,000 "units." Eli Lilly & Co., Indianapolis. (*Jour. A. M. A.*, February 5, 1927, p. 403).

**ANTISTREPTOCOCCIC SERUM (NEW AND NONOFFICIAL REMEDIES, 1926, p. 339).**—This product is also marketed in 20 cc. and 50 cc. piston syringes. Parke, Davis & Co., Detroit.

**TABLETS GENTIAN VIOLET MEDICINAL—"NATIONAL", 0.0324 GM. (1/2 Grain).**—Each tablet contains Gentian Violet Medicinal—"National" (New and Nonofficial Remedies, 1926, p. 167) 0.0324 Gm. (1/2 grain). National Aniline and Chemical Co., New York.

**ENTERIC COATED TABLETS GENTIAN VIOLET MEDICINAL—"NATIONAL", 0.0324 GM. (1/2 Grain).**—Each tablet contains Gentian Violet Medicinal—"National" (New and Nonofficial Remedies, 1926, p. 167) 0.0324 Gm. (1/2 grain) and is coated with phenyl salicylate containing some keratin. National Aniline and Chemical Co., New York.

**RICINOLEATED SCARLET FEVER ANTIGEN.**—A bacterial vaccine detoxified with sodium ricinoleate according to the method of Dr. W. F. Larson. Enough favorable evidence has accumulated to indicate that this preparation is worthy of clinical trial by physicians. The antigen is used for active immunization against scarlet fever.

**RICINOLEATED SCARLET FEVER ANTIGEN IMMUNIZING-LILLY.**—This product is prepared from whole broth cultures of scarlet fever streptococci, containing 1,000 million organisms in each cc. modified with 2 per cent of sodium ricinoleate. It is marketed in 1 cc., 5 cc. and 20 cc. vials. Eli Lilly & Co., Indianapolis. (*Jour. A. M. A.*, February 19, 1927, p. 567).

### PROPAGANDA FOR REFORM

**THE ORGANISM OF RHEUMATIC FEVER.**—A report of the isolation of the specific organism causing rheumatic fever has been published and also the results of trials with an antiserum. Streptococcus cardioarthritidis, the name given to the organism which was isolated from the blood culture of only two patients with rheumatic fever, differs in only one respect from the usual nonhemolytic



streptococcus. The claim of the relation of the organism to rheumatic fever appears to rest chiefly on the results obtained from treating patients with an antiserum prepared by immunizing a horse with this streptococcus. The case reports are not convincing. Favorable reports with a serum prepared by immunizing horses with cultures of streptococci isolated from throats of rheumatic fever patients have been published previously; they were probably due to a nonspecific reaction. Since then, curative effects have been reported from the use of various forms of nonspecific protein preparations. (*Jour. A. M. A.*, February 5, 1927, p. 405).

**OVACOIDS AND TESTACOIDS.**—The advertising claims made for these preparations of Reed and Carnrick are typical of those made by this firm for products examined by the Council on Pharmacy and Chemistry and denied admission to New and Nonofficial Remedies in 1907. Ovacooids and Testacooids are stated to be "the hormones or autocooids of the sex glands in high concentration, and *active by mouth!*" Ovacooids is stated to "represent the hormones of the entire ovary in highly concentrated form, associated with the hormones of the anterior pituitary and with phosphorus in organic combination." Testacooids are claimed to contain "in addition to the testicular hormones, . . . the hormones of the prostate gland and organic phosphorus." The use of these preparations is irrational and dangerous because the character of the ingredients and their amounts is not declared. The administration of organic phosphorus is not only irrational but superfluous. Though indefinite and semisecret, the composition of Ovacooids and Testacooids is sufficiently specific to place the preparations in the class of pluriglandular mixtures, to the menace of which the Council on Pharmacy and Chemistry has repeatedly called attention. The most important ingredient of Testacooids is apparently a testicular extract. Such preparations are not accepted for New and Nonofficial Remedies and their therapeutic value has not been demonstrated. There is nothing in the claimed composition of Testacooids to furnish a basis for the extensive claims made for the preparation. (*Jour. A. M. A.*, February 5, 1927, p. 422).

**SPENGLER TREATMENT OF TUBERCULOSIS.**—The Spengler immune blood treatment of tuberculosis is a method based on the principle of passive immunization. In 1908, Carl Spengler announced his theory that red blood cells play an important part in immunity to tuberculosis, immune substances being contained within the stroma of the erythrocytes of the resistant animal. He reported favorable results with his preparation "Spengler's I. K." The method has had only small support. From the published reviews it may be concluded that the method is not of value. (*Jour. A. M. A.*, February 5, 1927, p. 425).

**EPHEDRINE.**—The Council on Pharmacy and Chemistry states that the reports which have been issued since its first report was published, warrant the acceptance of the drug for New and Nonofficial Remedies and the recognition of acceptable brands if the firms which market them will agree to be conservative in their claims. The Council report is accompanied by a report of the A. M. A. Chemical Laboratory on the establishment of standards for ephedrine hydrochloride and ephidrine sulphate. The Laboratory's report shows that the ephedrine hydrochloride of the Abbott Laboratories and of Burroughs, Wellcome & Co. meet the provisional standards, but that a pure sulphate has not yet been prepared. However, it appears that the study which is being made in the laboratories of Eli Lilly & Co., gives promise that a satisfactory product will shortly be available. The Council (1) endorsed the report of the A. M. A. Chemical Laboratory and provisionally adopted the submitted standards for ephedrine hydrochloride; (2) it admitted ephedrine to New and Nonofficial Remedies; (3) it voted to accept the ephedrine hydrochloride of the Abbott Laboratories when acceptable advertising is issued; (4) it voted to accept the ephedrine hydrochloride of Burroughs, Wellcome & Co. when it is marketed in the United States and acceptable advertising is issued; and

(5) it voted to accept Ephedrine Sulphate-Lilly (formerly called "Fedrin") when the firm has achieved satisfactory standards and when the advertising is found acceptable. (*Jour. A. M. A.*, February 12, 1927, p. 482).

**SOME MISCELLANEOUS NOSTRUMS.**—The A. M. A. Chemical Laboratory reports the analysis of the following: Balzone Treatment for Tuberculosis, exploited by one N. L. Waelchli, Denver, Colorado, appeared to be essentially a little colored water into which a few drops of some volatile oil, similar to pine oil, was to be dropped, the water brought to a boil, and the steam inhaled. Spray-O-Zone, exploited by the Coral Chemical Company, Inc., Buffalo, N. Y., appeared to be essentially borax and potassium chlorate dissolved in water. Boals Rolls, exploited by the Boals Rolls Corporation, New York City, consisted of large tablets found to contain starch, figs and phenolphthalein. Harriet Hubbard Ayer's Face Cream, manufactured by Harriet Hubbard Ayer, New York, was found to contain ammoniated mercury and zinc oxide. (*Jour. A. M. A.*, February 12, 1927, p. 501).

**THE "ADJUSTO" ("JUVENATOR").**—This is another indecent swindle barred from the mails. One G. R. Damiani, who seems to have done business variously under such trade names as G. Lotto, Olds Appliance, Wisett Manufacturing Co., and Sampson Manufacturing Co., all of St. Louis, Mo., have exploited the device called the "Adjusto" and the "Juvenator." Now a fraud order has been issued against the Sampson Manufacturing Company and G. R. Damiani. (*Jour. A. M. A.*, February 12, 1927, p. 501).

**PARATHYROID EXTRACT AND LEAD POISONING.**—Experiments have been made which indicate that parathyroid extract-Collip mobilizes from the bones a certain amount of stored lead which is readily available. Since the amounts of lead excreted following this treatment were far greater than those obtained in previous investigations, when ammonium chloride or phosphoric acid were given, the method will probably have some therapeutic value in the treatment of lead poisoning. (*Jour. A. M. A.*, February 19, 1927, p. 572).

**THE ORITONE LABORATORIES.**—"Oritone," an alleged aphrodisiac, sold by the Oritone Laboratories, Kansas City, Mo., has been declared a fraud by the post office authorities. Like many other nostrums that have, in the past, been sold by fraudulent medical mail-order concerns, Oritone, according to the government's report, was obtained from George A. Breon and Company, a concern that occasionally appeals to physicians in the pose of a reputable pharmaceutical house. The formula, according to the federal authorities, was: gaduol, 1 mm., thyroid substance, 1/12 gr., lecithin, 1/8 gr., suprarenal substance, 1/5 gr., extract nux vomica, 1/6 gr., pituitary substance, 1/24 gr., yohimbine hydrochloride 1/12 gr. The evidence of the federal authorities showed that the use of the drugs contained in Oritone, either singly or in combination, will not and cannot relieve or cure "lost manhood" or rejuvenate the aged. (*Jour. A. M. A.*, February 19, 1927, p. 585).

**MEDICAGO SATIVA AND MEDICAGO ABRUS COMPOUND.**—According to the advertising of M. L. Howe, Indianapolis, each tablet of Medicago Sativa (Howe's) is "equivalent to 120 gr.," presumably of Medicago Sativa. Each tablet of Medicago Abrus Compound is said to contain Abrus precatorius 2 gr. and Medicago sativa 10 gr. In the price list, Medicago Sativa (Howe's) is said to be "Tonic, Aphrodisiac, Diuretic, Galactagogue. Especially indicated in prostatic troubles, and cystitis, or any pus condition of the genito-urinary tract, including gonorrhea." The advertising states further that the firm has reports of its great benefit in diabetes. The firm further states that the combination contained in the Medicago Abrus Compound gives a remedy unsurpassed for diabetes. Medicago sativa is a botanical name for the plant that yields Alfalfa. Abrus precatorius is a name for Jambul seed. The value of "Medicago Sativa (Howe's)" may be estimated by the following from a report of the Council on Pharmacy and Chemistry:



"Alfalfa is a good cattle feed, but only nostrum exploiters have suggested its use as a medicine for human beings. Jambul was in vogue many years ago as a remedy for diabetes. It was tried, found wanting, and relegated to the therapeutic scrap heap. (*Jour. A. M. A.*, February 19, 1927, p. 588).

**DETERIORATION OF ANESTHETIC ETHER.**—According to the U. S. Pharmacopeia X: "Ether to be used for anesthesia must be preserved only in small, well closed containers, and is not to be used for this purpose, if the original container has been opened longer than twenty-four hours." The impurities found in ether are due to the presence of air and moisture, and the action of daylight, which leads to complex oxidations. Among the products found are hydrogen peroxide and most commonly irritant aldehyde. (*Jour. A. M. A.*, February 19, 1927, p. 588).

**USELESSNESS OF INSULIN BY INUNCTION.**—Attempts to give insulin by mouth, perlingually, by duodenal tube, intratracheally, by inhalation, and by rectum, either in solution or in suppositories, have given results which in the main are either mechanically difficult, inconclusive, inconstant, or wasteful of the drug. An investigation has recently been made to decide whether insulin inunctions would be of any value in the treatment of human diabetes. As much as 1,000 units of insulin dissolved in almond oil was rubbed for a period of one hour into the skin of the abdomen, chest and arms with entirely negative results. Other vehicles were used with equally negative results. On the basis of this evidence the conclusion must be that insulin inunctions "are useless as a therapeutic measure." (*Jour. A. M. A.*, February 26, 1927, p. 652).

**DESITIN NOT ACCEPTABLE FOR N. N. R.**—The Council on Pharmacy and Chemistry reports that Desitin is the nondescriptive name applied to an ointment manufactured by the Chemische Fabrik Desitin Aktiengesellschaft, Berlin-Tempelhof, Germany, and distributed in the United States by the Desitin Chemical Company, Providence, R. I. According to the distributor, there are in 100 parts of Desitin, 28 parts zinc oxide, 14 parts "Bolus alba" (kaolin), 16 parts "Adeps lanae treated with  $H_2PO_4$  and neutralized with KOH," 22 parts "Cod-liver oil extract, which is purified in a  $KMnO_4$  solution and then extracted. This extraction is subjected to a treatment with  $Cl_1$ ," and 20 parts "Natural Vaseline." No information was furnished the Council in regard to the actual composition of the cod-liver oil extract and an analysis by the "Rijks-Instituut" did not confirm the claimed composition. The ointment is recommended for all sorts of skin lesions and extravagant claims are made for its effects. The Council found Desitin unacceptable for New and Nonofficial Remedies because the claims made for it are unwarranted. (*Jour. A. M. A.*, February 26, 1927, p. 666).

**LUKOSINE NOT ACCEPTABLE FOR N. N. R.**—The Council on Pharmacy and Chemistry reports that "Lukosine" is an "antiseptic Vaginal Douche Powder" manufactured by The National Drug Co., Philadelphia. In the advertising, the preparation is said to contain "the valuable antiseptic constituents of Thyne, Peppermint, Eucalyptus, Wintergreen with Boric Acid, Alum, Zinc Sulphate, Hydrastine Hydrochloride, Sodium Salicylate and Phenol." Extravagant claims for the efficiency of Lukosine in the treatment of Leucorrhea and other conditions are contained in the advertising. Preparations similar to Lukosine have been offered to the medical profession and to the public for many years. The Council found Lukosine unacceptable for New and Nonofficial Remedies because it is a semi-secret, needlessly complex, and therefore irrational, mixture, marketed with a therapeutically suggestive name and with unwarranted claims, in such a way as to lead to its indiscriminate and ill-advised use by the public. (*Jour. A. M. A.*, February 26, 1927, p. 667).

## ABSTRACTS

### SYPHILIS OF CERVIX

George Gellhorn, St. Louis (*Journal A. M. A.*, No-

vember 27, 1926), is of the opinion that syphilis of the cervix occurs far more frequently than is generally assumed, and that it may exhibit manifestations in any of the three stages of the disease. Primary and secondary lesions, while sufficiently characteristic, are apt to be overlooked because they produce no symptoms. On the other hand, tertiary lesions which appear in the form of gummas or gummous ulcers give rise to bleeding and discharge, and resemble carcinoma to such an extent that many patients have erroneously been subjected to unnecessary and dangerous operations. In contradistinction to the usual protracted course of the disease, was the observation of "galloping" syphilis of the cervix in which the infection ran its entire course from the initial lesion to a fatal ending in less than a year. A number of interesting and important problems are intimately connected with the subject of syphilis of the cervix. These are: (a) the infectiousness of cervical secretions in syphilitic patients; (b) the possibility of dystocia from rigidity of the cervix caused by syphilitic lesions and (c) the transition of syphilis into cancer of the cervix.

### TOLERANCE TO FOREIGN BODIES WITHIN POSTERIOR SEGMENT OF EYE

Albert E. Bulson, Jr., Fort Wayne, Ind. (*Journal A. M. A.*, December 18, 1926), summarizes his discussion of the literature and his presentation of cases as follows: It is assumed that in the majority of cases, loss of vision as well as loss of the eyeball is due to inflammatory, degenerative and structural changes brought about directly or indirectly by the trauma and infection, and not to the mere presence of a foreign body in the posterior segment of the eye, and that the removal of the foreign body does not in itself improve the prognosis, as it is very probable that ultimate loss of vision, eyeball, or both, in a series of comparative cases, would be as conspicuous in cases in which extraction had been performed as it would be in those in which extraction had not been performed. In a large percentage of cases the patient is as well off if the foreign body is left in the posterior segment of the eye as he would be if it is extracted, particularly if the eye traumatism would be increased by the extraction, and for the following reasons: (a) Even if the foreign body is removed successfully, assurance is lacking that the eye, sooner or later, may not become the seat of inflammatory and degenerative changes that may destroy sight and perhaps require enucleation. Furthermore, the effort at removal may do more harm to sight and the integrity of the eye than would be the case if intervention had not been done. (b) If sepsis has been introduced, or iridocyclitis has set in, the prognosis is as good with the foreign body in the eye as with it out, for in either case enucleation would be adopted if the process did not yield with reasonable promptness to appropriate treatment. It is entirely problematic whether or not the foreign body in the posterior segment of the eye in itself would in any way alter the course of the inflammation. Perhaps copper may be taken as an exception. The cases herein reported, and many more of a similar nature that probably could be obtained, indicate that preservation of useful and even fairly normal vision, or eyeball, or both, is possible for prolonged periods of time, perhaps during the lifetime of the patient, with retention of a foreign body in the posterior segment of the eye; it is justifiable to assume that these patients would not have fared any better nor would it have been any safer had intervention been adopted at any time in the course of any of the cases. Every case is a law unto itself, but most of the teaching concerning the subject under discussion has been toward too much radicalism in electing intervention in foreign body cases. The plea, therefore, is made that there should be less haste in advising enucleation, and less general inclination to be energetic in endeavors to extract foreign bodies from the posterior segment of the eye. More time and thought should be given to an analysis of the conditions presented in each individual case, and the possibilities that may follow intervention and nonintervention. Furthermore, more time and care should be given treatment. The danger of sympathetic inflammation in the average



perforating injury with retention of a foreign body in the eye is as great after the foreign body has been removed as it was before, and in neither case the well trained ophthalmologist will recognize the time for the cessation of conservatism. Cases of the type under discussion, whether the foreign body is removed or not, potentially are dangerous throughout the life of the patient, who should be so advised in order to be on his guard and ready to consult a competent ophthalmologist at the first indication of trouble. His best interests are not conserved by the ultraradicalism advocated by some ophthalmologic writers.

#### STREPTOCOCCUS VACCINE AS PREVENTIVE MEASURE FOR SCARLET FEVER

D. V. Nikitin, Moscow, Russia, (*Journal A. M. A.*, December 25, 1926), relates his experience with streptococcus vaccine and the results of his clinical study of postvaccinal sickness, which, in cases of strong reaction, may resemble a grave infectious disease. In twenty-six cases after strong reaction, a scaling of the upper epidermis could be observed, mainly localized in the neck, chest, soles of the feet and palms. Another child, the second week after a single vaccination, gave evidence of acute nephritis (dropsy, albumin and tube casts) with subsequent recovery. An insignificant or weak reaction (local eruption around the locus not present and temperature normal) was observed with the first vaccination in forty-four cases, or 13.2 per cent; with the second in 25.9 per cent of cases, and with the third in 55 per cent. Thus, with the first vaccination the author obtained 17 per cent strong reaction, 13.2 per cent medium, and 69.8 per cent weak; with the second, 7.3 per cent strong reaction, 25.9 per cent weak, and 66.8 per cent medium; with the third, 2 per cent strong, 55 per cent weak, and 43 per cent medium. Desquamation was observed in 34 per cent of the total number of cases. Subsequent diseases developed in 1.5 per cent of all cases. It is especially noteworthy that children who had indubitably undergone scarlet fever did not react at all toward inoculation; there were nine such cases. Children whose parents had had scarlet fever showed a weak reaction, while children, both or only one of whose parents had never been subject to scarlet fever, gave a medium or strong reaction. This feature can be regarded as one more proof to the effect that the streptococcus is actually the scarlet fever germ, toward which an hereditary immunity is worked out after the disease has once been present. Of the 767 patients vaccinated, only eight fell ill, all in the group which had had just one vaccination, thus forming 1.05 per cent of all vaccinated cases and 1.5 per cent of singly vaccinated children; as to those children who had been vaccinated two or three times, none of them caught the disease, though the larger number (578 of 767) were from infected communities, and some of the vaccinated children entered into direct contact with the diseased. Nikitin concludes: The postvaccinal sickness is similar to genuine scarlet fever. The inoculation of vaccine is harmless. Immunity after vaccination is acquired only after repeated inoculation (two or three injections). Vaccination decreases the number of scarlet fever cases and is helpful in cutting down epidemics in settlements. Especial attention is to be paid to temperature and the state of the kidneys at inoculation.

#### PREVENTION OF MEASLES BY IMMUNE GOAT SERUM

Goats have been immunized by Ruth Tunnicliff and Archibald L. Hoyne, Chicago (*Journal A. M. A.*, December 25, 1926), with green-producing measles diplococci and their filtrates, and an antibacterial and antitoxin serum was produced. From 4 to 6 cc. of immune goat serum was given to children 1 year old or older and to a few nurses, with a negative history of measles after a definite exposure to measles. All persons who did not receive serum, and all who received serum five days or more after exposure, developed measles. Goat serum prevented measles in 45 per cent of persons who received

serum on the fourth day after contact with measles patients, and in 97 per cent of those who received it within the first three days after exposure. All infants under 1 year of age who received serum after the fourth day after exposure developed measles. Ninety-eight per cent of infants given serum within the first four days after exposure failed to show any signs of the disease. Reactions to the goat serum were observed in 12 per cent of those injected. Although the duration of passive immunity with immune goat serum, as with human convalescent measles serum, is only a few weeks, the serum appears to be useful in preventing measles in very young and sick children, and in stopping epidemics in institutions where the inconvenience of an epidemic is great and the mortality may be high.

#### INFLUENCE OF FOCAL INFECTION AND PATHOLOGY OF ARTHRITIS

In a previous communication, the suggestion has been advanced by Pemberton that part of the pathologic changes of arthritis and the rheumatoid syndrome depend on a disturbance in the blood supply of the parts concerned, particularly in the finer capillaries. In a subsequent communication, evidence has been adduced by Ralph Pemberton, F. A. Cajori and C. Y. Crouter, Philadelphia (*Journal A. M. A.*, December 25, 1926), substantiating this suggestion. Since publication of the foregoing, further data have been accumulated by these writers which strengthen the conditions reached. A total of twenty-one articles and four normal persons has now been studied, with the result that this larger series shows the experimental induction of a delay in the removal of sugar from the blood, after ingestion, in essentially the same proportion of cases; namely, 50 per cent. It is of interest to note that so far this delayed removal has not been induced in a supposedly normal person. Among arthritic patients who give a normal sugar-removing mechanism, many others will also show a delayed removal if the blood flow to the limbs is interfered with. Since normal persons apparently do not react in this way, it implies that there already exists in the arthritic patient, showing a normal rate of removal, a partial interruption of some vascular channels, such that further interference with the that at least part of the pathologic change of arthritis and the rheumatoid syndrome is referable to interference with the blood supply in the smaller vessels. These experiments also emphasize again the distinction that must be observed between a lowered sugar tolerance as generally understood, in the diabetic sense, involving a failure of combustion, on the one hand; and, on the other hand, a "lowered sugar tolerance," better termed a delayed sugar removal, of nondiabetic nature dependent on changes in the blood supply, probably especially to the muscles. If vasodilator drugs are capable of restoring toward normal part of the dynamic pathologic change that accompanies arthritis, it would appear conceivable that a favorable influence might also be exercised by them toward some clinical phenomena of the disease. Observations were undertaken on arthritic patients in various stages of the disease to whom vasodilator drugs, chiefly sodium nitrite and erythrol tetranitrate, were administered. It seems justifiable to record that in twelve instances out of thirty-two cases, or 37 per cent, a favorable influence was observed on the arthritic or rheumatoid syndrome at selected periods of treatment. In some of these cases the nitrites were administered alone and, in others, in conjunction with various measures, but always under such circumstances as to make it possible to give some interpretation as to the effects of the drug. Some of these cases had been studied so long as to make it possible apparently to relate definitely to these drugs any favorable influence that followed their use. These several observations can be explained at present only on the basis that arthritis is accompanied by a disturbance of peripheral blood flow, probably in the nature of vasoconstriction. This phenomenon is apparently an important result of focal infection and constitutes at least part of the pathologic process of arthritis. It explains the value of the many measures



that improve the blood flow and metabolism in the arthritic or rheumatoid syndrome and allied conditions.

## TWO FACTORS IN CATARRHAL DEAFNESS

Hypertrophy of the lower turbinate has long been known to be a most potent factor in catarrhal deafness (obstruction of the eustachian tube). Otologists have for many years amputated the posterior hypertrophy by means of a cold snare and this has frequently been a satisfactory procedure, but there are other cases in which the result may be obtained even after cold snaring has failed. The procedure employed by Greenfield Sluder, St. Louis (*Journal A. M. A.*, November 27, 1926), for blood flow is sufficient to induce a delayed rate of sugar removal after ingestion. This occurs in 50 per cent of arthritic patients showing a "normal" sugar-disposing mechanism. If, therefore, these figures are combined, the total proportion of arthritic persons showing an actual or potentially delayed rate of removal of sugar from the blood after ingestion is 80 per cent. The influence of vasodilator drugs on the glucose-disposing mechanism was studied by the authors. These experiments present evidence that a delayed removal of blood sugar, of nondiabetic nature, can sometimes be restored toward or to normal by vasodilator drugs, which are known to open up vascular channels. In view of the parallelism between arthritis, focal infection and a "lowered sugar tolerance" of nondiabetic nature, this is additional evidence this purpose consists in the destruction of the soft tissues of the posterior tip of the turbinate by means of the galvanocautery. One incision is made under the tip, another is made on top of the tip, and a third incision is made on the middle of the tip and is prolonged backward until it reaches the face of the eustachian tube. Then, from in front, the middle incision is prolonged forward as far as the judgment of the surgeon may indicate. The healing of this wound fixes the scar on the bony tip of the turbinate, and as it contracts in its maturity it draws the anterior lip of the tube forward more or less to open it. The operation is difficult as it must necessarily be done through the mouth, the field being visible only in the postnasal mirror; but when properly performed it has proved to be no more dangerous than any other postnasal surgery. A most important factor is that the nose once operated on should be left absolutely alone. No nasal washes or applications should be made to the wound. The anterior nostril should be closed by a cotton pack which should be left in place for a week. The second factor in catarrhal deafness is the sphenoid cell. The customary sphenoid cell is well known as limited to the body of the sphenoid; the prolongation of the cell downward into the pterygoid process even as far as the bifurcation of the plates occurs rather frequently. Sluder identifies this prolongation by means of radiopaque iodized oil which may be introduced into the sphenoid cell and then makes a roentgenogram. Opening the sphenoid according to the procedure described by Proetz is advocated by Sluder.

## PRELIMINARY REPORT OF COMMITTEE ON EDUCATION APPROVED BY COUNCIL ON PHYSICAL THERAPY OF AMERICAN MEDICAL ASSOCIATION

Such educational opportunities as are necessary to teach the proper practice of the various methods of physical therapy may be divided into three heads: (1) premedical school courses; (2) courses in medical schools; and (3) courses of information for the practicing physician. Premedical Courses: The committee believes that courses in biologic physics should be added to the curriculums of premedical schools. This recommendation is in agreement with a similar recommendation made several years ago by a committee of the National Research Council. The committee realizes that this will be a slow process, owing to the lack of properly qualified instructors. While the selection of the subject matter for courses in biologic physics must always be made by the men responsible for such courses, the Council on Physical Therapy will be glad to act in an advisory capacity in laying out the

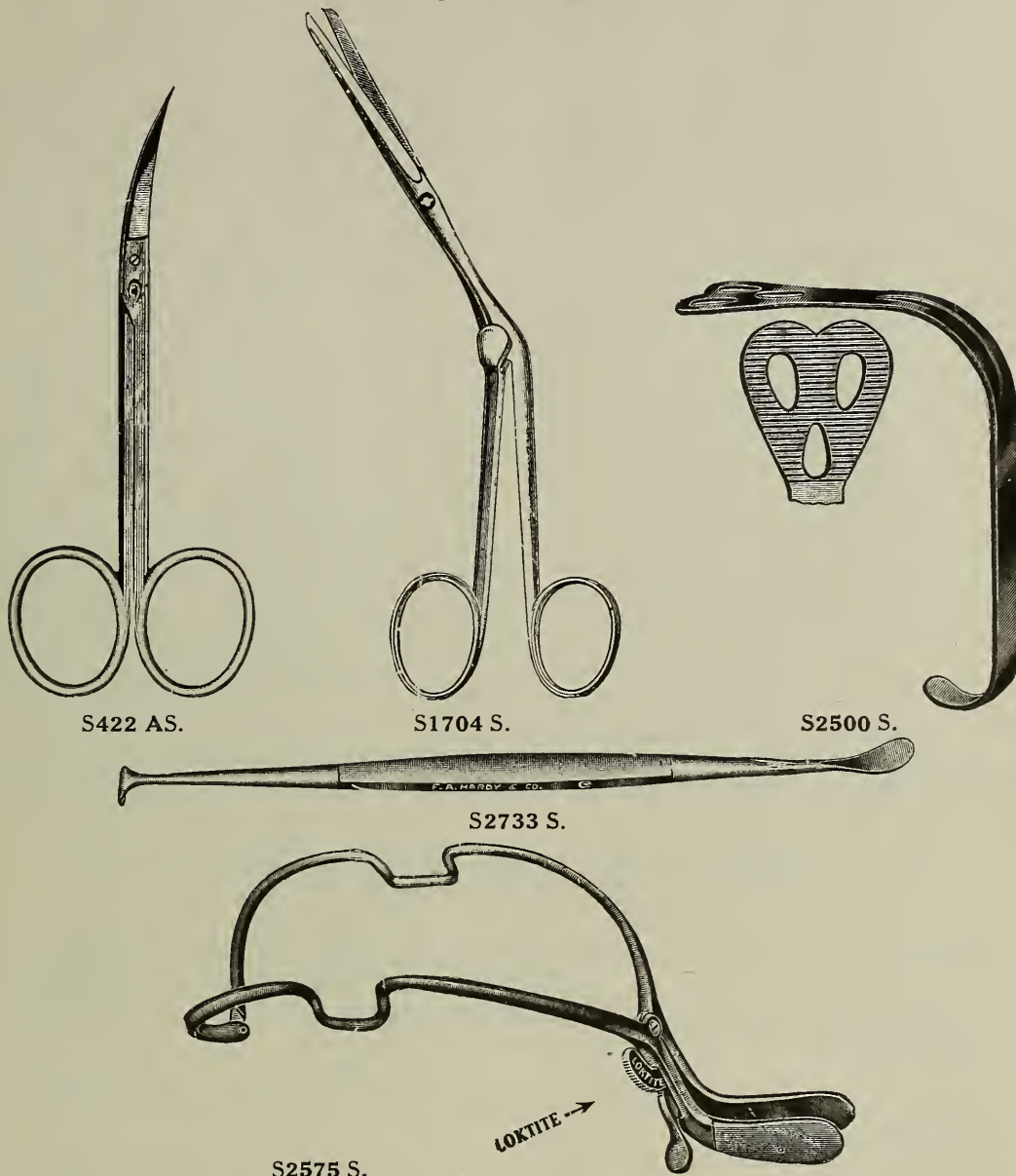
broad outlines of the courses. The chairman of the Committee on Education has already received a request for such advice from a state university. As the courses in biologic physics are concerned with the application of physical principles to biologic problems, greater emphasis should be placed on the biologic needs than on the physical side of the subject. The instructor should have, therefore, a broad knowledge of the biologic phenomena that may be attacked through physical methods. He should be primarily a trained biologist rather than a trained physicist. Courses in physics naturally are planned and taught by physicists, who usually look on this subject as a branch of applied mathematics. They are interested in training students to make physics their life work. Great emphasis is placed on the exactness of the methods of physical investigation. It would be highly advantageous to the students and to the department if, in the regular physics courses, physical principles were more frequently illustrated by biologic material. The biologically minded student might have a different attitude toward physics if he realized that many of the fundamental principles in physics were discovered and elaborated by biologists for use in their biologic investigations, and that, as a result of these contributions, many biologists have been inscribed in the history of science as physicists. Medical Courses: The courses in the medical school should be open to upper classmen and graduate students, and should be given by men who are familiar with physical principles, but whose primary interest is in therapeutic applications. The courses would best be given in connection with hospital clinics. Courses for Practitioners: Information for practicing physicians could be given first by a series of carefully prepared articles published in the current scientific magazines, and second, by encouraging the presentation of papers on physical therapeutic topics before medical societies. They should not be of the usual case-report type, nor should their content be a summary of contributions to the progress of medicine. The purpose of the papers should be a purely educational one.

## DIATHERMY IN TREATMENT OF GONORRHEAL ENDOCERVICITIS

Budd C. Corbus and Vincent J. O'Connor, Chicago (*Journal A. M. A.*, November 27, 1926), consider the use of diathermy only in infections of the endocervix caused by the gonococcus of Neisser. Its use in other forms of infection is not contraindicated. Endocervical diathermy is contraindicated, however, during pregnancy and in the early acute stages of the infection, or when evident, active pelvic inflammatory changes, such as salpingitis or pelvic cellulitis, are present. In the early acute stages of the infection, the daily use of the vaginal bath speculum combined with a hot sitz bath helps to allay the accompanying vulvovaginitis and cervicitis. It is well to wait until the acute inflammatory symptoms have subsided before applying the thermophore to the endocervical canal. Treatments are continued from thirty to forty minutes at from 116 to 117 F. (from 46.5 to 47 C.). Occasionally the treatment is kept up for sixty minutes or longer with a varied reduction in temperature. It is emphasized that, in order to be successful in the cure of gonorrheal endocervicitis, infection in the urethra and in Bartholin's and Skene's glands must also be eliminated. Diathermy is a successful means of eliminating endocervical gonorrhea. The mechanism effecting such cures depends on: 1. A satisfactory high frequency machine. 2. The method of conveying the heat radiation (active and inactive electrode), which should be properly designed and adjusted. 3. The time of application of heat radiation, that is, any reasonable limit of not less than twenty-five minutes, which may extend as long as sixty minutes, absolutely controlled by the thermometer readings. Treatments must be continued until it is definitely proved that the gonococcus is permanently eliminated from the tissues. This presupposes a sufficiently prolonged clinical observation and the use of accurate technical methods for determining a cure. The

(Continued on Adv. page xx)

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S1704 S. Knights Nasal Scissors .....	8.50 each
S2500 S. Weders Tongue Depressors, large and small.....	2.00 each
S2733 S. Hurds Tonsil Dessector and Retractor.....	3.00 each
S2575 S. Jennings Loktite Mouth Gag, large and small.....	15.00 each

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FORT WAYNE



## ABSTRACTS

(Continued from Page 128)

clinical results attained by the careful application of this method have been satisfactorily demonstrated in the management of approximately 150 patients, during a period of more than six years.

## BOOK REVIEWS

**THE SURGICAL TREATMENT OF GOITER.** By Williard Bartlett, A.B., A.M., M.D., D.Sc., F.A.C.S. with Foreword by Dr Charles H Mayo With 130 Original Illustrations. Price, \$8.50. C. V. Mosby Company, St. Louis, 1926.

Another good book has been added to the literature covering the diseases of the thyroid gland. This book is limited to the question of the surgical treatment, however, the author remarks that "It is not claimed by any surgeon having authority in this field that all goiters are to be operated upon."

Chapter I deals with the history of the subject and it is largely an epitome of Halstead's Operative Story of Goiter. Chapter II is by Louis B. Wilson, of Rochester, who discusses pathology under the headings of (1) inflammations, (2) exophthalmic goiter, (3) endemic goiter, and (4) malignant tumors. Chapter III is entitled, "The Heart in Goiter," and is written by Samuel B. Grant. He states that cases without symptoms of cardiac failure should not be subjected to preoperative digitalization as the only effect of the digitalis in these cases seems to be a toxic one. Chapter XVII deals with laryngeal complications and is presented by Frank K. Hansel.

The other chapters are by Bartlett and cover the strictly surgical problems. He is in agreement with other American writers and presents his subject in a very

plotters have suggested its use as a medicine for human beings." Jambul was in vogue many years ago as a remedy for diabetes. It was tried, found wanting, and illuminating manner. He advises resecting the gland with temporary constriction of the stump with an elastic band, and no doubt, in suitable instances, this resection under the aid of a tourniquet is highly satisfactory.

**DISEASES OF WOMEN.** By Harry Sturgeon Crossen, M.D., F.A.C.S. Professor of Clinical Gynecology, Washington University Medical School, and Gynecologist in Chief to the Barnes Hospital and the Washington University Dispensary; Gynecologist to St. Luke's Hospital; Consulting Gynecologist to the Jewish Hospital, St. John's Hospital, and the St. Louis Maternity Hospital; Fellow of the American Gynecological Society and of the American Association of Obstetricians, Gynecologists, and Abdominal Surgeons. Sixth Edition, revised and enlarged. With nine hundred thirty-four engravings, including one color plate. Price, \$11.00. The C. V. Mosby Company, St. Louis, 1926.

Dr. Crossen has devoted this work exclusively to the diagnosis and treatment of Diseases of Women as these diseases are met in the office and at the bedside by the general practitioner. The reviewer feels certain that both the general practitioner and gynecological specialists will welcome this new edition. The author has sifted the enormous mass of literature on this subject and has selected that which will give the physician the best foundations for treating patients suffering with these diseases. The use of iodized oil for x-ray visualization of the uterine and tubal cavities is carefully described; the author feels that this method "marks a distinct advance in gynecological diagnosis, particularly with reference to determining the site of tubal occlusions causing sterility." He recommends the use of iodipin as a substitute for lipiodol. New material has been added under a number of subjects to bring them up to date.

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### ORIGINAL ARTICLES

#### DIAGNOSTIC PUNCTURE OF THE ANTRUM OF HIGHMORE\*

B. D. RAVDIN, M.D.  
EVANSVILLE

In reviewing the papers presented before this section for the past few years I find that the subject which I have chosen has not been under discussion. It therefore occurred to me that a practical consideration of this subject would be both interesting and profitable.

A thorough and clear understanding of the anatomy of the lower half of the lateral wall of the nose is essential before puncturing of the antrum is contemplated. The lateral wall of the nose may be compared to one side of a hollow pyramid in which a large portion of this wall is missing. This defect is covered entirely, with the exception of a very small opening, by a number of bones and a thick double membrane. The hollow pyramid is the body of the superior maxilla, the nasal wall of which has a large defect leading directly into the antrum. The posterior half of this opening is covered by the palate bone. It consists of two principal parts, the horizontal, articulating with the palatal process of the superior maxilla to form a part of the floor of the nose, and the perpendicular or vertical part which covers the greater portion of the posterior half of the opening into the body of the antrum.

The inner surface of the vertical plate has two prominent ridges which correspond to the insertion superiorly of the middle turbinate and inferiorly to the inferior turbinate. This latter structure covers the anterior inferior defect in the lateral nasal wall and is composed of two processes, the process turbinalis, which is inserted into the crista turbinalis of the frontal process of the superior maxilla and the process maxillaris, the largest of the two, extending downward and covering the lower edge of the maxillary foramen. This process is the thinnest of all the bony walls covering the opening of the antrum and is the most desirable wall to pass a needle into the maxillary sinus.

The anterior superior defect of the maxillary foramen is covered by portions of the ethmoid capsule, namely, the bullae superiorly and the middle portion by the uncinate process. The spaces left between the articulations of the bulla and the uncinate process and the inferior turbinate are covered by a double layer of mucous membrane called the nasal fontanels.

Puncture into the antrum is safest made through the highest part of the inferior meatus at a point about three ccm. back from the anterior end of the inferior turbinate. A thinner area on the lateral wall is the pars membranacea of the middle meatus. However, most men avoid puncturing through this area on account of the inconsistency of the anatomy in this region in relation to the floor of the orbit. At this point puncture can easily be made into the orbit instead of the antrum. I have often heard some men say that the antrum can easily be irrigated through its normal opening and probe puncture is not essential except in rare instances. Such has not been the experience of our office. The varying anatomy of the nasal septum and the middle meatus and the numerous variations of the hiatus semilunaris has taught me that it is much easier to irrigate the antrum through the inferior meatus.

In former years probe puncture of the antrum of highmore was resorted to principally in determining the presence or absence of purulent secretion in acute and chronic infections of this cavity. While it is true that the same procedure is employed today for exactly the same indications, we have observed in our own practice during the past few years, a number of interesting results from the above procedure where purulent secretion was not found.

All of us, I am sure, are consulted from time to time by patients complaining of headaches, moderate or severe, occurring primarily in the early morning hours. This we have been taught by experience to be rather suggestive of intranasal pressure, or sinus pathology. In a number of such cases, where no marked intra nasal pathology was demonstrable, as marked deflected septum, hypertrophied middle turbinate causing pressure on the lateral wall or septum, and the presence of purulent secretion in any meati or in

\*Presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association at the West Baden session, September, 1926.



the naso-pharynx, the probe puncture and irrigation of one or both antra, depending on the symptoms present, has brought complete relief of all headaches. In none of these cases where relief was obtained was purulent secretion recovered in the washings. I wish to report several interesting cases along this line.

Miss J. was referred in February, 1924, on account of very severe early morning headache which had been present for months. She would be awakened about four a. m. with intense pain in the frontal and temporal region, requiring medication to get relief. When no medicine was taken the pain gradually subsided and disappeared by ten or eleven o'clock in the morning. Examination of her nose: Septum fairly straight, turbinates normal size and in normal position, no pressure points, no purulent secretion, transillumination both antra cloudy. No x-ray pictures made. Antrum puncture was performed on both sides, return solution was perfectly clear. The patient reported the following day that she was not awakened by her usual headache and when seen recently for another condition she informed me that she has not been troubled with any more headaches.

Mr. M., shoe salesman; consulted us in March of 1926 on account of severe early morning headaches. Numerous physicians had examined and prescribed for him but with no relief. Examination of nose showed a fairly normal intra-nasal picture so far as his septum and turbinates, no secretion present. Transillumination, both antra very cloudy. X-ray showed both antra very gray and other sinus apparently negative. Probe puncture of both antra brought no purulent secretion. The return fluid was perfectly clear. Bacteriological examination negative. This patient obtained complete relief from his headaches and there has been no return to date. My personal opinion of these cases where no purulent secretion is recovered and the patient receives relief is that these patients are suffering from a partial vacuum in the antrum. Patients suffering from a complete vacuum have as a rule constant pain as shown in the following case.

Sister C. consulted us for a constant pain that she had been suffering from of three weeks' duration. The pain was limited to the whole right side of her face and head. Dental examination had been negative. Examination of nose and throat negative. Transillumination, right antrum cloudy, left antrum clear. A probe puncture of the right antrum was performed and as the needle entered the antrum there was a hissing of air and the patient stated that all her pain had entirely disappeared.

It is a well established fact that pathology in the maxillary sinus is responsible for a certain percentage of cases of asthma. This condition has no doubt been observed by every man present. In a small series of asthmatic cases we have observed four cases which have shown marked im-

provement or apparent complete relief from probe puncture and irrigation of the maxillary sinus.

Mrs. S., of a neighboring city, was recently referred to our office by her physician on account of an acute asthma of four weeks' duration. During this time she was carefully examined by her local physician, who excluded any bronchial or cardiac disturbance. Examination of nose: Slight septal deflection, turbinates fairly normal as to size and position. Transillumination of accessory sinuses, both antra cloudy. X-ray of sinuses showed same condition. Probe puncture and irrigation of both antra brought the patient apparently complete relief. She has had no further attacks of asthma to our knowledge.

Mrs. P. was referred for examination of nose and accessory sinuses on account of an unexplainable asthma. She had been examined by one of our best internists. This patient was obliged to take ten minims of adrenalin by hypodermic every night to obtain relief. Intra-nasal examination did not reveal anything abnormal. Transillumination of sinuses showed both antra to be very cloudy. X-ray was the same. Probe puncture of both antra with injection of sterile water. This was withdrawn for bacteriological examination. There was no purulent secretion present on washing the antra with sterile salt solution. This patient did not require adrenalin the night following the antrum puncture and washing. A vaccine was prepared from the antrum washings which proved to be a mixed infection. This was administered to the patient for twelve doses. Following the discontinuation of the vaccine the patient has been free of all asthmatic symptoms.

A very unusual phenomena was observed in the following case after the probe puncture of both antra, for a persistent posterior nasal dripping. No relief was obtained so far as the posterior nasal discharge but there was complete cessation of a long standing polyuria.

We have observed one case of chronic otalgia entirely relieved by probe puncture and irrigation of the antrum on the affected side.

During the past few years I have been interested in accessory sinus infections in children in relation to the production of systemic disease. In the fall of 1925 I was asked to examine a child who was subject to frequent attacks of nasal infections and bronchitis. This child had previously had a tonsillectomy but there was very little improvement. Transillumination of antra showed both to be very cloudy. Under general anaesthesia both antra were punctured and the washings collected for bacteriological examination. No purulent secretion was found. A vaccine was prepared and administered to the child with surprising results. He went through the entire winter without a cold and there were no further attacks of bronchitis.

A little girl six years of age, was examined by us in October, 1925, for repeated colds. She had

her tonsils and adenoids removed about a year before. Both antra were very hazy on transillumination. It was therefore decided to puncture the antra under general anaesthesia. The injected sterile water was withdrawn, bacteriologically examined and a vaccine prepared but for some unknown reason her local physician did not administer it. This child went through the entire winter and spring without a cold and has shown remarkable improvement in her general health.

Recently I examined a child of two and one-half years of age whose general health has been far below normal and affected with severe asthma requiring the daily administration of adrenalin. Tonsils were infected and transillumination and x-ray of sinuses showed both antra cloudy. Under general anaesthesia the tonsils and adenoids were removed and both antra were punctured, washings collected and vaccine prepared. This has been administered to the little fellow with marked general improvement and the further use of adrenalin was not required.

Before concluding may I mention a few precautionary measures which we unvariably follow out in every antrum puncture performed in our office. Upon the introduction of the needle into the antrum we carefully determine if the distal end of the needle is freely movable. If it is fixed we are certain that the point has engaged mucous membrane or deeper adjacent structures. No injection is made until we are thoroughly satisfied that the needle can easily be manipulated in the antrum. Since we employ a slightly curved Lichtwitz needle, we always note if the point of the needle is curved downward into the antrum. Air is never injected through the needle before the introduction of watery solution. The majority of reported deaths from antrum puncture, were due to air embolism. This was first brought to the attention of the profession by Hajek in 1907, and since this date numerous cases have been reported, especially by foreign authors.

For the past few years we have resorted to the use of the English type of bulb pump rubber syringe for antrum irrigation. With this type of syringe, we are better able to control the pressure exerted on the injected fluid than with a piston syringe. All fluids are injected very slowly. After starting the injection of fluid into the antrum, if there is no return flow of the solution, we immediately discontinue injection until we ascertain the trouble. Frequently a slight manipulation of the needle, or slight withdrawal is all that is necessary to get a ready return flow.

During the injection we constantly observe the face of the patient. Evidence of any swelling during the irrigation is a signal to discontinue the injection at once.

Recently while irrigating the antrum of a child, having taken all of the precautions previously mentioned, we noticed a sudden swelling of the

soft tissues of the cheek and peri orbita. In this particular case we feel that there was a dehiscence in the bony wall of the roof of the antrum.

In those cases where we are not able to pass a needle through the inferior meatus into the antrum, we do not attempt to perform a probe puncture above the inferior turbinate in the pars membranacea. In such cases we resort to a small hand drill and find no difficulty in passing into the antrum through the inferior meatus at its highest point.

In conclusion I would recommend that probe puncture and irrigation of the antra be resorted to more frequently both in children and adults. Carefully performed through the inferior meatus at its highest point, puncture of the antrum is a safe procedure if all precautions are taken, and the results obtained in many cases certainly justifies its frequent use.

#### DISCUSSION

D. O. KEARBY (Indianapolis): It is my practice to puncture the antrum as the doctor has described—at the highest point on the lateral wall of the nose, under the inferior turbinate. He mentioned a point one-half or three-quarters of an inch posterior to the vestibule of the nose. I do not pay much attention as to how far my trocar goes back. I rather let it find its own way, for the reason that if I do this operation the next day or in two or three days, it will find its way back to about the same place. If the inferior turbinate is pretty tight against the lateral wall of the nose it is my custom to take a little flat instrument and refract the turbinate and lift it up, making the operation easy. It is my rule after puncturing the antrum, if I feel I may want to irrigate again, to enlarge the opening with some sort of a rasp so it will be easy to get in the next time.

I am glad that Dr. Ravdin mentioned the choice of this route over that of the middle fossa. A distinguished gentleman from Cincinnati before the section a couple of years ago advocated the middle fossa route, claiming that he could always irrigate through the normal outlet. If I know anything about the anatomy of the lateral wall of the nose that is an impossibility. Anyone who tries it will, as the essayist mentioned, eventually meet with disaster; he will find the solution in the orbital cavity or in the cheek. It is easier to go through the middle fossa because that is membrane and the patient does not get the terrific noise; but the danger does not justify the procedure.

The reason for puncturing the antrum is the relief of a suppurative process, acute or chronic, but as the doctor has said great relief is afforded in some conditions where purulent secretion is not found.

I am glad the doctor mentioned the asthmatics and the cases of bronchitis. You will not cure these cases, but you will help many of them.



These cases drain out into the lungs as has been shown by the use of various dyes.

As to the use of vaccines, I have never convinced myself that I was able to help anybody with either autogenous or stock vaccines.

The essayist emphasized the care with which one should introduce the trocar, being sure that it is within the antral cavity before the injection. That is the practice in my office, and especially, are we careful when starting to introduce fluid to do so slowly and carefully. The question of a needle or a trocar is a matter of choice with the operator. I did use a Lipswitz needle, but finally discarded it because it was too small. I prefer the old Douglas trocar.

I would like the essayist to say something about his method of anaesthesia before proceeding with this puncture.

Now I would like to depart a little from the subject. In Indianapolis doctors and laymen are talking about sinus troubles and window resections. I want to know what is a window resection and what we expect to accomplish by it. I enlarge my openings with a rasp, but I do not call that a window resection. It is probably a half-inch posterior to the anterior tip of the inferior turbinate and high up. My idea of a window resection would be a Caldwell-Luc or a Denker operation where you have a window at the bottom of the lateral nasal wall. There are several questions I would like to ask: First, does anyone presume to make a large nasal antral opening in an acute suppurative antrum other than to enlarge the opening sufficiently to introduce a catheter for further irrigation? Second, in the so-called dry or hyperplastic type found when looking for foci of infection, is a window indicated, and is it expected to close later? Third, if it does not close will the window be a menace to other infections of an acute nature? Fourth, if there are hyperplastic thickenings and polypoid pouches in the recesses and angles of the antrum will ventilation by window resection cause this diseased membrane to free itself and return to normal? I am at a loss just when to do a window resection, and how much is justified. In the chronic suppurative type of maxillary antrum I do not think anything but a radical operation will answer. It is not radical, it is simple, but someone has given it that name and the patients think it is something terrible. I think it would be better if the word "radical" were eliminated.

M. G. EREHART (Huntington): Owing to the fact that my paper happens to be along the line of foreign proteins, and that the use of autogenous vaccines has been recently discussed, I would like to cite a case of a young man that I had last spring, a man about twenty-one years old. He had an acute arthritis in both ankles and both knees, which were badly swollen, red and painful. On examining the boy I found he had a maxillary sinus infection on one side. He

was brought to the office and I washed out the sinus, obtaining a large amount of pus. He came in the next day and I washed out the sinus, obtaining the same thing. I washed out the sinus ten times over a period of two weeks, followed by mercurochrome and then a 2 per cent Dakin solution, with no improvement in the arthritis or the antrum infection on the fifteenth day. I boiled some skimmed milk and gave him 2 cc. intravenously and they took him home. In about a half hour he began having a severe chill, his temperature began to go up until it reached 104; then in about an hour he broke out in a profuse perspiration which lasted about an hour, after which time he felt improved. Two days later he walked into my office with complete recovery from the arthritis. I washed out the antrum and the fluid returned clear. I washed out the sinus two days later and at this time the fluid returned clear. I kept him under observation for three weeks after he returned to work.

E. J. LENT (South Bend): Like Doctor Kearby, I have been using the Douglas trocar for twenty years. I like it because it is large and to my mind is anatomically correct in its curve. I have not the fear of pumping air into the maxillary sinuses that some people have. I have never seen any ill results. My practice is to cocaineize under both the inferior and middle turbinate. I then pass the trocar and try a little air. Instead of having the nurse use the syringe I use it myself, the nurse holding the trocar. With the middle turbinal region thoroughly cocaineized the lavage is comparatively free from pain.

My experience has taught me that normal salt solution gives equally as good results as anything else. I have discarded all others. I divide antrum cases into two classes—those that are relieved by irrigation and those which fail to respond. I do not hesitate to irrigate them ten to fifteen times. If this does not relieve the situation I sometimes enlarge the opening and put in a Holmes pharyngoscope in order to orient myself. If the antrum of Highmore is filled with myxomatous tissue I feel that window section is a waste of time. I do not see how it can be made large enough without sacrificing a large amount of the inferior turbinate, and I feel that its function is vastly more important than the danger from the so-called radical procedure. If I am unable to relieve these cases by irrigation I then resort to the Caldwell-Luc procedure.

B. D. RADVIN (closing): So far as the question of vaccines is concerned I am not enthusiastic about them. I use very few and it is a question in my mind how much good a vaccine does.

As to our method of anaesthesia, we first spray the nose with a very weak solution of cocaine. Then a cotton swab dipped in a 1 to 1000 adrenalin and allowed to absorb cocaine flakes, is

inserted under the inferior turbinate at the highest point of the inferior meatus and allowed to remain for about ten minutes. The patient is put in an upright position with the head down. In this way there is not quite as much absorption where there is a tendency towards cocaine poisoning and there is a dropping of secretion from the nose rather than secretion passing backward into the naso-pharynx. Since adopting this posture we do not have nearly as many cases of patients showing symptoms of cocaine poisoning.

As to making large window opening in acute cases, I do not feel it is indicated unless the case goes on to the stage where there are enormous quantities of pus being evacuated daily, and especially where the patient begins to show symptoms of sepsis I think it is well to enlarge the opening so you can easily get in with a large canula and irrigate freely and obtain good drainage and ventilation.

I feel every one of these cases must be individualized. You must use your own judgment as to whether or not you should make a large opening in the inferior meatus or continue to just puncture daily.

I was interested in Dr. Erehart's case. It reminded me of one that I took care of last spring. A lady had a pronounced polyneuritis which resulted from an influenzal infection. The infection localized itself in the left antrum. We punctured the antrum and then decided to enlarge the opening considerably. I washed out the antrum for several weeks and then came to the conclusion that the daily washings were probably doing more harm than good. I stopped the irrigations and in four days there was a cessation of purulent secretions. I feel we can overdo irrigation. It has been my experience that in those cases where you have enormous quantities of purulent secretion, if you have a large opening for drainage and plenty of aeration, by the use of gentle suction these cases will clear up nicely.

I agree with Dr. Lent that it is difficult to do a thorough intranasal resection and get clear down to the floor of the nose. Our procedure is very much like that of Dr. Kearby. We make a large opening anteriorly and towards the floor of the nose.

Dr. Erehart spoke of arthritis. Within the last two weeks we had an interesting case of polyarthritis in a man. He was totally incapacitated and unable to get around but by the simple puncture of one antrum and the infraction of the middle turbinate on the same side, within twenty-four hours this man was able to get out of bed and walk around. There was an enormous outpouring of serous fluid for about twenty-four hours after the infraction of the middle turbinate.

## THE TREATMENT OF CLUB FOOT

ROBERT A. MILLIKEN, M.D.

INDIANAPOLIS

The many failures of treatment and recurrences of the ordinary forms of congenital talipes equino-varus to be seen in any large orthopedic clinic seem to warrant a brief review of the principles of treatment. I do not propose to detail at length the complicated elements of the deformity nor to review *in extenso* the voluminous literature. My intention is to emphasize the fact that the treatment of this common deformity is a long hard process, not subject to easy standardization and involving expert judgment at every step, from its inception to complete recovery.

Although the question is not conclusively answered the weight of the evidence points to one structure as the keynote to the whole matter. This structure is the deltoid ligament and more especially the anterior two of its three divisions. These run from the anterior edge of the malleolus of the tibia, the first along the mesial border of the astragalus to the scaphoid, the second to the sustentaculum tali of the calcaneus. The posterior slip from tibia to calcaneus is less often involved. Dissection of club feet of adults, of infants, and of foeti points to contraction and thickening of this ligament as the primary defect, all others being secondary. Indeed the associated muscular and bony abnormalities of the older case are easily explained as results of this primary contracture. (Views as to the cause of this primary factor are pure theory.) We have then to think of club foot as primarily a contracture deformity and plan on treatment accordingly. Certain it is that any plan of treatment which neglects this element is doomed to failure. I am far from saying that this one ligament alone needs our attention, for secondary defects of bone, tendon, or ligament may have become extreme enough to demand separate consideration.

There are four ways to deal with a contracted ligament: it may be stretched, it may be cut, it may be detached at one or both ends, finally the bony curve may be shortened to compensate. Consider a bow tightly strung, the bow may be straightened by cutting the bow string, by stretching the bow string, by detaching it from its attachment at one end, or, finally, by cutting out a piece of wood to shorten the bow. In principle these methods are open to us in the treatment of club foot. Much discrepancy has arisen from lack of agreement as to just which element is the bow string and which the bow.

Having then this concept of the pathogenesis of club foot, that it is a contracture deformity of the deltoid ligament, our methods are naturally devisable into two chief groups. First, there are those early cases in which secondary deformities are not severe and are naturally self correctible after correction of the primary contracture. Next



are those cases in which secondary deformities are fixed or rigid, demanding separate consideration. In the first category are unfortunately a minority of cases as seen by the orthopedist for they are almost exclusively under one year of age and only too rarely are they treated properly and so grow up to enter the second class. This group contains the older children and adults who, by prolonged malposition and walking, have so distorted their bones, secondarily contracting ligaments and muscles and stretching others, that these are a bar to correction.

I have made this separation because I believe it has great practical importance. It would perhaps be better if all cases of club foot were brought to the specially trained orthopedist but as our country is organized this is impossible. The general practitioner treats the great bulk of fractures and for the same reasons he will continue to treat the great bulk of early club feet. I believe that the more severe or older cases should never be touched by anyone without much experience, for ineffective or faulty treatment enormously increases the difficulty. On the other hand, I believe that the average case of club foot in an infant can be quite well cared for by the man who delivers the baby. Unfortunately it is impossible to describe any hard and fast line as to where the function of the orthopedist should begin and that of the general practitioner end, but perhaps it is safe to say that any case not satisfactory at the end of six months' treatment (if the treatment started at birth) should be referred to the orthopedist. I shall indicate later what I mean by "satisfactory."

#### TREATMENT OF THE EARLY CASE

Treatment should begin on the day of birth. Treatment should never be relaxed for one instant until success is attained. The church may forgive back-sliding but a club foot will not, and a week's vacation in treatment will add a month to the course of the disorder. As to the recognition of club foot in infants is necessary for many infants naturally have adducted feet much resembling superficially a mild bilateral talipes. A unilateral deformity should offer no difficulty but careful examination is sometimes necessary when the feet are symmetrical. The important point to notice is whether the visible deformities are passively and actively over-correctible. If by tickling and scratching we can coax the baby into abducting, everting and dorsiflexing his feet there is no club foot, but repeated trials and prolonged watching are often necessary to determine this point. As suggested there are three elements to the congenital club foot deformity: *equinus*, the foot will not dorsiflex beyond a right angle and may stop anywhere short of a right angle; *varus*, the sole is tilted to look toward the mid-line and cannot be made to face outward; *forefoot adduction*, the heel and front part of the foot make a curve whose con-

vexity is outward and cannot be straightened. Each of these elements must be treated separately, and in a predetermined order or there will be neglect of one.

The early treatment is routinely manipulative. 1. The foot is grasped with both hands with the crotch of the thumbs in the concavity of the deformity with the tips of the thumbs and forefinger meeting over the convexity. Slow, steady pressure via the hypothenar eminences is applied until the baby shows evidence of discomfort. It is held at this point for an instant, relaxed and repeated. 2. The knee is bent and the tibia grasped just below the knee with the flat of the palm over the internal condyle i. e. right hand for right leg, left hand for left leg. The other hand grasps the foot from below in such a way that the ball of the baby's foot lies flat on the operator's index metacarpal, the fingers and thumb curving naturally over the dorsum of the foot. A slow, steady twisting motion turns the sole outward, again until the baby shows evidence of pain, when it is relaxed and repeated. It is often necessary to grasp the heel and roll it outward in a like manner, maintaining the bent knee with protective hand. The reason for this is that with the knee straight and unprotected by counterpressure the everting pressure on the foot is transmitted to become an abducting pressure at the knee and so cause strain of the internal lateral ligament producing capsular laxness and knock knee. 3. With the knee straight (to tighten the gastrocnemius) the foot is similarly forced in dorsiflexion as far as possible, held, relaxed and forced again.

Such are the manoeuvres designed to stretch the contracted deltoid ligament and to prevent or diminish secondary contractures and deformities. But it is not enough to know what to do. One must have a schedule of application and it is here that the trouble comes for the stretching should be done several times a day. It is necessary for the physician to instruct the nurse, mother or other attendant in their performance and see to it that they are done. Unfortunately some mothers are too chicken hearted to perform them effectively or at all, and some other person must be found. It is manifestly impossible for the physician to call several times a day for months and unless the cooperation of the family can be secured failure is certain. Assuming that the family will cooperate they should be told to manipulate every time the baby's diaper is changed. This will fix it in their minds with a recurring duty not ordinarily neglected. At each visit the physician should supervise one manipulation himself to correct errors and he should, moreover, from time to time, perform it himself. Only by feeling with his own hands can he estimate progress or its lack. The amount of the correction estimated in degrees from the normal should be recorded at monthly or fortnightly intervals. It is astonishing what

rapid progress can be made in severe deformities if the above schedule is carried out from the beginning.

By the time the baby is two months old his skin will stand adhesive and a new regime can start. He should be seen at no longer intervals than a week and his feet held in the maximum of correction with adhesive strips. The adhesive is started at the top of the calf directly posterior, brought diagonally down over the external malleolus, and while one hand everts and dorsiflexes the foot the other rapidly brings the tail of the strip around the foot to return above and anchor to itself. A second strip overlapping and further forward (i. e. to the metatarsophalangeal joint) tightens the retention. A circular strip anchors the top, and gauze bandage over all tightens again and keeps it from slipping. Meanwhile the family must continue their manipulations for all the adhesive does is to hold what they have gained.

This schedule must be continued as long as a gain is being made. If by the time the baby is six months old progress is at a standstill or success seems far away an orthopedist should be consulted. The criterion of cure of club foot is active (not passive) over-correction of all elements. If, on the other hand, satisfactory over-correction has been attained it is fatal to dismiss the case as cured at this time. The foot must be held with adhesive and manipulated at least once daily until the child begins to walk. During this waiting phase during which recurrence can occur the physician should see the baby at least once a month and the slightest suggestion of recurrence should be the signal for a resumption of the more active schedule. When the child begins to walk the first shoes should be stiff soled and have an outside lift to the sole and heel of not less than one-fourth of an inch preferably with a quarter to three-eighths extension to prevent breakdown of the counter of the shoe and overrolling. Such shoes should be worn for at least two years. Throughout this period the child should be seen as often as six times a year, thereafter at gradually decreasing intervals and at the first sign of recurrence referred to the orthopedist. It cannot be too strongly emphasized that any contracture deformity, no matter how treated, has an inherent tendency to recur. The family should be instructed to watch for the first signs of toeing in, walking on the outer edge of the foot, or on tip toe and warned of the meaning of these phenomena.

It is noticeable that I have made no mention of the use of plaster of paris or of braces. The omission is intentional for I believe that any case severe enough to demand the use of either one, in common with the case needing operation, is within the field of the orthopedist. During the "waiting period" mentioned above a brace would theoretically be preferable to adhesive but be-

cause of the difficulty of fitting and adapting to the growth of the baby, the expense involved, and the usual distance from a brace maker, it is ordinarily impractical. An ill fitting brace can do great harm, adhesive at worst will chafe the skin. I have not advised the use of plaster of paris because the application of a plaster case to a baby's club foot requires a special technique not familiar to the family physician, faulty application can do great harm and it precludes the home manipulation, throwing the whole burden of correction on the physician.

So much for the ideal case, more numerous than might be supposed. I shall speak only briefly of certain principles of treatment that should guide the surgeon in the more difficult cases. However, before turning to that let me again emphasize that to him should be referred those cases in which treatment has not been started early, cases that have walked on their deformed feet, cases that have had the treatment outlined above but without success, and more especially cases that have recurred after severe manipulations or operations of whatever nature. These last mentioned are the most difficult of all and the great merit of the "ideal" treatment set forth above is that in event of failure no harm has been done and the work of the orthopedist not embarrassed.

#### TREATMENT OF THE LATE CASE

The cases referred to the orthopedist may be roughly divided into three groups: Cases under two years of age, cases from two to ten or twelve, cases older than twelve. Like all arbitrary groupings this is subject to exception and each case must be judged in accordance with its own findings not on any artificial age yard-stick. But in general the rule may be laid down that no operation at all should be performed on a child under two years of age, and no operation on the bones of the foot under twelve.

Under two then the orthopedist is limited to manipulative treatment. This may be without anesthesia and by the medium of plaster of paris put on in two sections, a slipper and a cylinder connected by tension straps over the bent knee. It is often astonishing what progress can be made with a series of such plasters repeated fortnightly or thereabouts. Their application is, however, difficult, and fraught with dangers, and they have the disadvantages of requiring fortnightly visits. Under anesthesia manipulation may be by hand or the Thomas wrench. It is indeed an unusual case under two that will not yield to the wrench wielded by one who knows its use. Again comes retention at first in plaster, later by brace or plaster. As between these two I favor plaster but to one skilled in the fitting of a brace with a brace shop handy and with a patient under constant supervision, the brace may be preferable. It is easy for the family to remove or relax a brace, spoiling the treatment.



After two the bones of the foot are sufficiently ossified that they can stand operative attacks on the deltoid ligament. If previous manipulative treatments have reached their limit or have failed operation is indicated. We have open to us a large variety of operations and in choosing should favor the most conservative that will produce the desired result. An ineffective operation must be repeated and makes later treatment more difficult. Too radical operations lead to short, stiff feet as disabling as the original club foot. It can be safely said that in childhood only rarely are osteotomies or arthrodesing operations justified. We are in general limited to fasciotomies and tenotomies. It should be emphasized again at this point that congenital club foot is never primarily a muscular contracture and consequently tenotomy alone will never cure the condition. The operation most likely to be effective at this age is that of Ober, which consists of liberating the deltoid ligament from its tibial insertion, dissecting it superiosteally as far forward as the metatarsal heads and as far down as the under surface of the sustentaculum tali. With this may be combined division of the plantar fascia subcutaneously or by the subperiosteal method of Steindler. Only rarely will the tendon of the tibialis posticus require cutting. The temptation to cut or lengthen the tendo Achilles must be resisted until every trace of cavus has disappeared for it is the fulcrum against which our corrective force is applied, and it will usually be found that where the equinus is severe carrying the subperiosteal ligamentous dissection to the back of the ankle joint and cutting the capsule if necessary, loosens things so that the calf group of muscles can be stretched out. Following operations of this nature comes a series of plasters, then adhesive, then modified shoes as before.

In the older cases we are confronted with a new element, the economic. Heretofore we have assumed that the baby or young child can spend any number of months, or years, in gaining the best possible result. But older youths or adults will often prefer to sacrifice appearance or flexibility rather than an extra year of high school or wage earning. A short, stiff but painless foot which is in correct position and which can be put into the ordinary shoe is frequently no considerable disability. In these cases as in the younger cases of very severe degrees of bony abnormality osteotomies, wedge tarsectomies, and arthrodesing operations may be performed as the individual case warrants. We are here in a field so complex that no rules can be laid down. For secondary distortion and contractures are by now sufficiently potent to cause recurrence, if uncorrected.

In conclusion mention must be made of the function of the peroneal muscles as a factor in the maintenance of correction. The deformity of club foot stretches and weakens these muscles

and after correction there is a muscular imbalance tending to recurrence. In addition prolonged fixation adds to the atrophy. Whatever the method of correction the condition of this group must be noted at the conclusion and muscle training instituted to strengthen any weakness.

#### SUMMARY

1. The fundamental deformity of talipes equino-varus is contracture of the deltoid (internal lateral) ligament and all forms of treatment should take this factor into account.

2. The bulk of club feet will be treated by the family physician who should, however, use only the simpler forms of manipulation and retention.

3. The orthopedist should be consulted for all cases that have begun to walk or in which the family physician has failed.

4. Manipulation with or without anesthesia, plaster of paris, braces, fasciotomy, tenotomy, osteotomy and arthrodesis have all their proper places.

5. In general, in infancy only manipulation is indicated. In childhood fasciotomy and tenotomy, in late adolescence and adult life osteotomy become allowable.

6. The economic factor may warrant the adoption of a radical procedure otherwise not necessary, though leading to a result theoretically inferior.

#### RELATION OF WHITE SNAKEROOT TO HUMAN MILK SICKNESS\*

(FIELD STUDIES)

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*Historical*—Since the days of the early settlers in the Ohio River Valley states, Tennessee and North Carolina, one of the important problems has been the loss of stock from a disease known as trembles (so called on account of the characteristic symptoms of affected animals) with which has been associated a fatal human malady at first called sick stomach, and later termed milk sickness because of the belief that the trouble was contracted through the agency of cows' milk.

The prevalence of the disease may be judged from the estimate of one authority that in a section of Ohio nearly one-fourth of the early settlers died of milk sickness<sup>1</sup> while during the year 1815 over half of the human deaths in Dubois County, Indiana, were attributed to the malady<sup>2</sup>. Since the early days when the disease was apparently at its height, the trouble has gradually diminished, although it has never disappeared. The death of Abraham Lincoln's mother was said to have been caused by milk sickness. During the past five years nine human deaths attributed to milk sickness have been reported in Indiana, while during the past two years a number of

\*Contribution from the Botanical Department of the Purdue University Agricultural Experiment Station, Lafayette, Ind.

deaths have been reported in Illinois by the public press.

**Cause of Milk Sickness**—The cause of milk sickness has never been demonstrated. Among the numerous theories that have been advanced are that the disease is caused by poisonous gases from the soil; by toxic minerals in the soil that affect the milk of grazing animals, and so in turn affect the human; by poisonous substances in drinking water; by the bite of poisonous insects; by the presence of bacteria or other micro-organisms or by the effect on the milk of animals grazing on a poisonous plant. A study of the literature reveals that greatest suspicion has always been directed on white snakeroot, *Eupatorium urticaefolium* Reichard, (Fig. 1) as the cause of the trouble. According to this theory a poisonous principle in the plant enters the milk of cows which in turn affects the human. Although the white snakeroot theory has never been demonstrated since demonstration would involve serious risk to human life, it has generally been accepted as the cause of the disease.

Briefly, the evidence in support of the white snakeroot theory may be stated as follows:

1. The presence of white snakeroot in pastures where animals have grazed that furnished the milk supply to families in which milk sickness occurred has frequently been noted.

2. It has been demonstrated experimentally by the North Carolina Agricultural Experiment Station<sup>3</sup>, the United States Department of Agriculture<sup>4</sup>, the Purdue University Agricultural Experiment Station<sup>5</sup>, and the University of Illinois Agricultural Experiment Station<sup>6</sup>, that white snakeroot is fatally poisonous to cattle, sheep and horses. Indeed, the poisonous properties of white snakeroot are so readily demonstrated that in Indiana a successful feeding test has been conducted by farmers with sheep<sup>7</sup>.

3. That the poisonous principle in white snakeroot enters the milk has been shown by the North Carolina Agricultural Experiment Station<sup>3</sup>. In one experiment two suckling lambs died after exhibiting symptoms typical of trembles, apparently as a result of feeding white snakeroot to the mother ewes. (Fig. 2.) In another test three mice were fed butter made from the milk of a cow that was feeding on white snakeroot. One of the mice died two weeks later and another died in three weeks. There is much evidence to prove that the poisonous principle is carried in butter and may cause human milk sickness in this manner.

4. The gradual decline in the number of cases of milk sickness from pioneer days to the present is probably concomitant with the clearing of wooded areas and the cultivation of the land. White snakeroot is a woodland plant that is rarely found in the open and it disappears as soon as the land is cultivated.

5. It is well known that foreign substances

such as opium, arsenic, mercury, etc., may enter milk. In southern Indiana one of the most serious problems of the dairyman is the manner in which the flavor and odor of a plant known as wild garlic contaminates milk. It is a matter of common knowledge in the medical profession that opium and its derivatives may enter mother's milk and affect the nursing child.

6. The writer has visited a number of farms in Indiana on which have occurred cases of human milk sickness. In every case it was possible to trace the cause of the trouble to the use of milk or butter from cows that had grazed in woodland pastures badly infested with white snakeroot. In most of these pastures the snake-root showed plain evidence of having been grazed upon and in most of them animals have died after exhibiting symptoms typical of white snake-root poisoning. It is the purpose of the present paper to present this evidence in further support of the theory that white snakeroot is responsible for human milk sickness and that the poison is transmitted by milk or milk products.

**Toxic-Principle**—After several more or less unsuccessful attempts<sup>3-8</sup> the poisonous prin-



Fig. 1.—Flowering top of white snakeroot. Note the opposite, pointed leaves, each with three prominent veins, and the dense clusters of small white flowers.

ciple of white snakeroot has recently been isolated and studied by Dr. J. F. Couch of the Bureau of Animal Industry, Washington, D. C.

In a mimeographed preliminary statement issued by the Bureau of Animal Industry, dated October, 1926, Couch states that the poisonous principle is a complex alcohol to which he has given the name *trematol*. Two minor poisons are also present; one a resinous acid and the other a volatile oil. Butter or milk from animals that have grazed on white snakeroot may be sent to



the pathological division, Bureau of Animal Industry, to be tested for the presence of trematol. Directions for making the test may also be obtained from the same place. A positive test indicates danger, whereas a negative test does not entirely remove the possibility of the suspected samples being dangerous.

It has been determined that dried plants are almost as dangerous as green plants<sup>5</sup> and the writer has found evidence that frozen white snake-root has been responsible for the deaths of horses and goats in Indiana.

*Symptoms*—From a study of the symptoms of milk sickness in man as described by numerous writers supplemented by personal observations, it seems that the most important symptoms are, briefly, nausea, marked constipation, excessive vomiting accompanied by a greenish fluid from the stomach, peculiar breath odor (probably due to the presence of acetone) and the appearance of fever without a rise in temperature at any stage of the disease. Severe abdominal pains have frequently been noted<sup>9</sup>. The disease has been diagnosed as an acidosis by Walsh<sup>11</sup> who recommends sodium bicarbonate as a remedy.

The most important symptoms of white snake-root poisoning in cattle (Fig. 3) are (a) affected animals become listless and disinclined to exert themselves, called the "spring fever" stage by Indiana farmers; (b) acetone is excreted by the lungs and kidneys<sup>12</sup>; (c) spasms of violent trembling follow the spring fever stage; (d) the joints become stiff, the animal falls and death usually ensues from general weakness and exhaustion.

Similar symptoms are exhibited by sheep with the addition of a peculiar resting stage between periods of trembling during which the chin rests on the ground while the hindquarters are erect. In horses severe trembling does not ordinarily occur, the outstanding symptoms being unsteadiness of gait accompanied by throat paralysis.

The effect of the poison seems to be cumulative. Roughly, it usually requires from three to six pounds of white snake-root tops to kill a sheep, and from ten to twenty pounds ordinarily prove fatal to a cow or a horse, although the variations in this regard are great. From a study of cases of human milk sickness that have occurred in Indiana during the past few years, it seems that in order to contract the disease it is necessary to drink milk for a considerable period of time (say several weeks) from animals that have eaten white snake-root in quantity. There may be exceptions to this statement, however, due to variations in susceptibility of different individuals.

*Field Studies*—Since a study of 320 cases of milk sickness in man has shown seventy-seven deaths, or a mortality rate of approximately 24 per cent<sup>3</sup>, it is obvious that any attempt to prove the relationship of white snake-root to the human form of poisoning by drinking the milk of a cow

fed liberally on the plant would be an exceedingly dangerous experiment. A field study of a number of cases of milk sickness, however, has yielded considerable evidence to support the theory that the disease is due to white snake-root poison transmitted through the agency of milk. The following cases are offered as evidence:

Case 1—On November 4, 1926, the writer visited the farm of William H. Farmer, Independence, Indiana. Three members of the family, Mr. and Mrs. Farmer, and Kenneth Rhodes, a nephew, were ill with a disease diagnosed by their physician as milk sickness. Rhodes, who is sixteen years old, is the heaviest milk drinker and the only member of the family who has suffered previous attacks. The physician described the symptoms, which were similar in all three cases, as nausea, incessant vomiting, severe constipation, abdominal pains and cramps, the ejection of a greenish fluid with the vomit, weakness accompanied by trembling when the patients attempted



Fig. 2.—The ewe in the background was fed white snake-root without apparent harm. The suckling lamb in the foreground was poisoned through the agency of the mother's milk and died after exhibiting symptoms characteristic of white snake-root poisoning. (Courtesy North Car. Agr. Expt. Sta.)

to get out of bed, severe prostration and bad breath odor during the early stages of the disease, an odor that later became somewhat "sweetish." During convalescence when the patients were able to walk they complained of a heavy sensation in the feet.

A field investigation revealed an exceptionally heavy infestation of white snake-root in a ten-acre woods pasture in which the animals that furnished the family milk supply had grazed. It was estimated that at least 10 per cent of the plants had been grazed. The cows, according to Farmer, do not ordinarily graze in the woods since there has always been plenty of good bluegrass pasture available, but during the season of 1926 the animals were driven into the woods by an unusually severe plague of biting flies, and



there was little else to eat in the woods except the snakeroot.

In the same woodlot so many sheep have died from trembles that it became necessary to give up the raising of sheep on the farm. During the past two years two horses died after grazing in the woods, and both animals exhibited symptoms characteristic of snakeroot poisoning. A number of cats fed on the milk from this farm have died mysteriously.

When the milk was removed from the diet, the three patients showed almost immediate improvement. The infested woodlot has been fenced off and is no longer used for grazing purposes. A number of deaths from milk sickness have occurred in the Independence vicinity, although none during recent years.

Case 2—Charles Russell, his wife, and twelve-year-old son of Farmersburg, Indiana, became seriously ill about June 7, 1926. The attending physician diagnosed the trouble as milk sickness



Fig. 3.—Cattle suffering from a natural outbreak of white snakeroot poisoning on an Indiana farm.

and stated that frequent vomiting, severe constipation and abdominal pains were the outstanding symptoms exhibited by the three patients. On June 30, Mrs. Russell died.

All three used milk from cows that had grazed in a nearby woodlot. On inspection, the woods pasture was found to be badly infested with white snakeroot and the plants showed plainly that the cows had grazed upon them. None of the cows became ill, which is to be expected since they were all in milk, and only dry cows are usually affected since the poison seems to be readily voided in the milk. A two-year-old bull, however, died shortly after the death of Mrs. Russell. Dr. D. D. Bradbury, veterinarian, of Fairbanks, Indiana, diagnosed the cause of the young bull's death as white snakeroot poisoning since the animal exhibited symptoms typical of trembles. The bull could have contracted the disease either from grazing on white snakeroot or from suckling the cows. In the same woodlot stock died from trembles before the Russell family occupied the farm. Reports of the occurrence of other cases of milk sickness in the locality during previous years were also received.

A more detailed report of this case has been published in a farm paper<sup>10</sup>.

Case 3—William Schiller and wife, of Valermeier, Illinois, became seriously ill with a disease diagnosed as milk sickness. Among the symptoms exhibited by Mrs. Schiller as described by Dr. H. A. Cables, of East St. Louis, who attended the patients in St. Mary's hospital, were prostration, muscular weakness, vomiting and constipation. Her husband was not as badly affected but he complained bitterly of muscular weakness and he vomited a great deal. In both cases the urine gave no sugar reaction although the blood sugar was high.

A visit to the Schiller farm revealed the presence of white snakeroot in huge quantities in the pasture in which the family cow had grazed. The cow died of trembles while the Schillers were in the hospital. It also developed that when the family became ill, the use of the milk was discontinued but it was still given to the dog. The animal developed an acute attack of trembles and died.

Five years previous to this time the entire family was ill, exhibiting similar symptoms, and a son died. Mr. and Mrs. Schiller recovered from both attacks.

Case 4—During the fall of 1924 Mrs. Earl Clore, of Wallace, Indiana, and two children, became ill with a disease diagnosed by their physician as milk sickness. The patients exhibited symptoms characteristic of the disease. An investigation revealed an abundance of white snakeroot in the woods pasture in which the cows had grazed that supplied the milk used by the family. In this same pasture a number of grazing animals have died after exhibiting symptoms typical of white snakeroot poisoning.

Case 5—During 1904 a brother of Oscar McElwee, of Kingman, Indiana, died from a disease diagnosed as milk sickness by the attending physician. It was noted that when milk from cows that had grazed in a woodlot on the farm was fed to hogs, the animals died from trembles, and a number of hogs were lost in this manner. Suspicion being directed to the woods as a cause of the death of McElwee, the wooded area was fenced and has not been used for grazing purposes since. During January, 1925, the woodlot was inspected and was found to be heavily infested with white snakeroot. No further trouble was experienced in the McElwee family after the use of the wooded area for grazing purposes was discontinued.

Case 6—During October, 1920, Professor John Heiss, of Purdue University, noted a feeling of nausea, followed a day later by vomiting and marked constipation. The color of the vomit was a peculiar green and foul breath odor was present, described as similar to sewer gas. Shortly afterward six other members of his family became similarly ill, although a young son seemed to be



immune. The symptoms were carefully compared by the writer with published descriptions of milk sickness and they seemed to be very characteristic of the disease. The seven patients entered a hospital at Lafayette, Indiana, but the attending physician did not diagnose milk sickness since he was not familiar with the disease, and the cause of the trouble seemed to be a mystery. After reading a newspaper account of milk sickness, Professor Heiss suspected this to be the malady from which his family was suffering. He is the owner of a tract of land near Lafayette containing eight acres of woodland and the entire family milk supply came from a cow allowed to graze in this woodlot. An investigation disclosed the presence of white snakeroot in the woods in dangerous quantity. The use of the woodlot for pasture purposes was discontinued and no further trouble has since been experienced. Professor Heiss is very emphatic in the belief that the illness in his family was milk sickness.

Case 7—Curtis Bird, a farmer of Marengo, Indiana, and his wife, have suffered attacks of milk sickness for five successive years, with the exception of one season spent away from the farm in order to escape the trouble. During the summer of 1924 he agreed to use no milk or butter from his own farm and since then he has experienced no further trouble. The woods in which he kept his cows and in which a number of animals have died from trembles, was found to be badly infested with white snakeroot that had plainly been grazed upon.

Case 8—Elmer G. Reiff, of Idaville, Indiana, has a "poison woods" in which he has lost considerable stock, including nine horses and a number of sheep. The animals died after exhibiting characteristic symptoms of white snakeroot poisoning. Both he and his hired man have suffered from milk sickness after using the milk from animals that have grazed in the "poison woods." During May, 1923, the wooded area was examined and found to contain a heavy growth of white snakeroot that showed plain evidence of having been grazed upon.

A number of additional cases could be cited of the results of field studies in which the complete chain of evidence from the grazed plant in the woods in which the animals had been lost from trembles to milk sickness among people who used the milk, was found. This would mean useless repetition. It is significant, however, that in not a single case of milk sickness that was investigated in this manner did we fail to find the white snakeroot under circumstances that pointed to the plant as the cause of the trouble.

Evidence exists that there are many cases of milk sickness that are not recognized by physicians, who sometimes diagnose the trouble as ptomain poisoning, acute gastritis or other digestive disturbance. This is not strange since the subject of milk sickness is not included in modern

medical training and the disease is not recognized by the International Classification of Diseases nor by public health officials. Since the work carried on by the Purdue University Agricultural Experiment Station has revealed heavy livestock losses throughout Indiana from white snakeroot poisoning, numerous cases of milk sickness have been unearthed that would perhaps otherwise not have been recognized. Many unexplainable epidemics of disease in Indiana may have been due to snakeroot poisoning, a viewpoint shared by Dr. George W. Finley, health commissioner of Clay County, Indiana, who has had experience with the effects of the plant. White snakeroot is an exceedingly common species; it is estimated that about 10 per cent of the woodland pastures in Indiana are infested with the plant, and this probably holds true for other states.

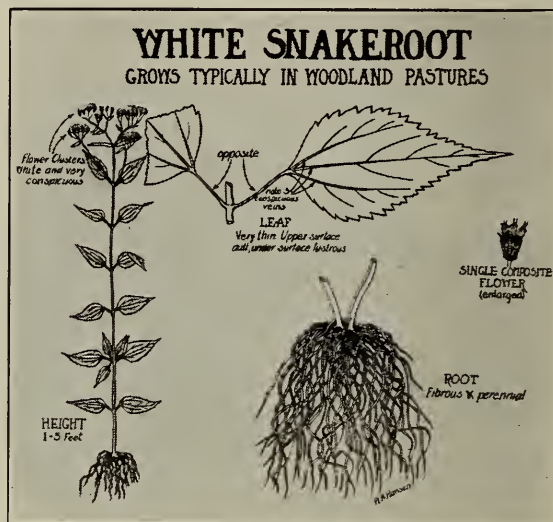


Fig. 4.—Diagram illustrating the characteristics of white snakeroot.

*Significance*—The evidence that white snakeroot is the cause of human milk sickness is excellent. If true, this information is of high value to the physician, particularly the country practitioner, in diagnoses. When patients exhibit symptoms of milk sickness, the finding of grazed white snakeroot in the woodland pasture in which the animals that furnished the family milk supply have been feeding should be necessary before final diagnosis is made. Physicians in the white snakeroot area can learn to recognize the plant from the accompanying diagram (Fig. 4) and descriptions. In case of doubt, specimens can be sent to the state agricultural experiment station for identification. Samples of the milk and butter should also be tested for the presence of tremetol. What appears to be a successful method of treatment for milk sickness has recently been announced<sup>11</sup>.

No cases of milk sickness in the cities have been noted in Indiana, although there is no reason why they cannot occur. Large quantities of white

snakeroot were found on a dairy that supplied milk to Indianapolis, and a number of cows had died from trembles contracted in the infested woods. In urban cases of milk sickness, it would be necessary to carry the investigation to the farm supplying the milk. It is entirely possible that some of the numerous mysterious cases of illness and death among city infants may be traced to the use of snakeroot poisoned milk since the chances are that children are much more susceptible to the danger than adults in the same manner that a much smaller quantity of the plant is required to kill a sheep than a cow or horse. This is a question, however, on which no data exists.

*Description*—White snakeroot is a handsome woodland plant with fibrous, matted roots and thin, opposite, sharply pointed leaves, each of which has three conspicuous veins. The under leaf surface is light green and somewhat shiny (particularly when stretched over an object such as a finger tip) while the upper leaf surface is darker green and not shiny, a valuable feature in identification. The plant blooms during September and October when the clusters of small, pure-white blossoms are exceedingly conspicuous. It grows to a height of two to five feet (about three feet is perhaps the average height) and the shallow roots usually yield readily when pulled.

White snakeroot has a number of close relatives which the plant greatly resembles and with which it can readily be confused, even by a person familiar with the species. The plant usually called white snakeroot in the catalogs of medicinal plant houses is not the poisonous species.

*Summary*—This paper gives the results of field studies which support the theory that milk sickness in man, an endemic disease, is caused by the use of milk from cows that have grazed on white snakeroot, a common and poisonous woodland plant.

This should be important in diagnosis, which should involve the finding of white snakeroot in the pasture in which the animals have grazed from which was obtained the milk or butter used by the patient. A diagram is presented as an aid to identification. (Fig. 4.)

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DIPHTHERIA MORTALITY IN INDIANA  
THE RECORD OF THE LAST SIX MONTHS  
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Ever since Behring and Roux announced their discoveries of diphtheria antitoxin, the medical profession have had in their hands a specific therapeutic agent which is probably more potent, as a cure of its specific disease, than is any other drug in the pharmacopeia, in any other specific field. Yet in spite of this fact about one out of every ten cases of diphtheria have resulted fatally. This fact at once raises the question, "What factor or factors operate in this state to counteract the beneficial effects of so promising a drug as diphtheria antitoxin?" To answer this question, the State Health Department conducted an investigation into all the deaths from diphtheria in Indiana occurring since September, 1926, and this report includes all cases heard from until the end of February, 1927, being the summary of one hundred and seventeen fatal cases. As the death records came in, the attending physicians were written and asked to give details of the history of their cases, and from the answers to these letters, the following data are compiled.

In the six months from September, 1926, to February, 1927, both inclusive, there were 1,842 cases of diphtheria reported, with one hundred and thirty-two deaths, or one death in fourteen cases, and ten more deaths than for the corresponding period the year previous.

The following percentages are calculated to the nearest whole number. This summary covers 117 deaths from diphtheria.

Physician called first day of sickness.....	16%
Physician called second day of sickness.....	18%
Physician called third day of sickness.....	26%

Physician called within three days of onset of symptoms.....	60%
Physician called after the third day of sickness .....	40%

TREATMENT

Patients receiving antitoxin .....	89%
Patients given antitoxin in one dose.....	68%
Patients given antitoxin in repeated doses .....	32%
Patients given 50,000 units or more on one dose .....	6%
Patients given 10,000 units .....	19%
Patients given less than 10,000 units.....	7%
Patients not receiving antitoxin at physician's first call.....	27%



Patients not receiving antitoxin.....	11%
Patients moribund when physician was called .....	21%
Patients dying within one day after physician called .....	15%
Deaths under six years of age.....	51%
Deaths between six and ten years, in- clusive .....	29%
Deaths over ten years of age .....	20%

Without a doubt there is a period in every case of diphtheria when, if antitoxin is given in sufficient dosage, the patient would be cured. In the treatment of diphtheria the human factor enters largely into the equation and human nature, even at its best, is prone to err. The above table demonstrates clearly several of the elements entering into this human factor, some of which are insurmountable, others obviously can and should be corrected. In forty percent of the cases, for which a physician was called the physician was not called until the patient had been sick over three days. Every physician knows that after the third day after the onset of symptoms of diphtheria the period has passed, in all probability, when antitoxin can be of assistance. No doubt this delay is caused, in certain instances, by carelessness or neglect on the part of the parents, but in the great majority of cases the disease is not suspected due to the insidious nature of the onset of diphtheria and also to the fact that most mothers are not keen observers of clinical symptoms. Slightly more than twenty-one percent of cases called in medical aid only after the patient was moribund and nearly fifteen percent more of cases died within the day following the physician's first visit. Some of these thirty-six percent of cases were apparently infected with a fulminating type of diphtheria giving a history of from two to three days but many of them were sick a week or more, the parents thinking they had an ordinary sore throat and did not call a physician until too late.

One case received a prophylactic dose of one thousand units of diphtheria antitoxin four days before death and before it was apparently ill. It is possible it was already infected and did not show marked symptoms. If so, the prophylactic dose would be an inadequate therapeutic dose.

Now we come to a factor which the medical profession would do well to ponder. Out of the eighty-nine percent of cases calling in medical aid, thirty-two percent or one out of every three were given antitoxin in repeated doses, usually ten thousand units the first day and then ten thousand units daily until death. Nineteen percent or one out of every five were given only ten thousand units and seven percent received less than ten thousand units, some as little as three thousand units. Only six percent of cases received fifty thousand units or more of antitoxin in one dose. It is hard to understand why, in this day and age, medical men still persist in giving anti-

toxin in repeated inadequate doses, instead of one adequate dose, especially in view of the fact that authorities have been teaching against this practice for years.

Death in diphtheria is due to the toxin, which is at first free in the blood stream, uniting with the body tissues. If enough antitoxin is injected into the body before the tissue-toxin union has occurred, then the toxin is neutralized by the antitoxin and so made harmless. If the administration of antitoxin is delayed until the tissue toxin union has occurred, then no amount of antitoxin will break the union, and the case results in death of the patient or more or less permanent damage to his tissues, crippling him for the rest of his life. It is obvious that an inadequate dose of antitoxin even though administered early gives the same final results as that following delayed treatment. Only part of the toxin is destroyed while the remainder goes merrily on with its deadly work. No one knows nor can estimate how long the toxin will be free in the blood stream before it will be taken up by the tissues, but from experience it is fair to assume that in the average case there will probably be little tissue-toxin union before the third day. In exactly two-thirds of the cases in this series the physician was not called until after the patient was sick two days. In over one-fourth of the cases, the physician did not give antitoxin until one day or more after seeing his patient. It is apparent that in the great majority of cases the patient will not receive antitoxin until he has been sick at least three days or more. There is no way to estimate how much toxin is in the patient's blood but we know from experience that ten thousand units are so often insufficient that it is not a safe dose. The physician giving repeated doses gives, say one-fifth of the whole dose or ten thousand units, say the third day of the disease, then another ten thousand the next day and so on each day, giving away below the limit of safe dosage, each succeeding dose being too late to be effective and although the patient may eventually receive a large total amount of antitoxin the factor of time due to unnecessary delay in giving all but the first dose changes what might have been an adequate dose to an inadequate dose and the patient meanwhile dies of toxemia.

On the other hand, if the physician would give fifty thousand units, which is not a large dose by any means, instead of the first ten thousand units, there would in all probability have been enough or more than enough antitoxin to have united with all the toxin in the blood at that time and the patient might have lived. It is well known that fifty thousand or one hundred thousand units of antitoxin are both safe doses even for children. The only danger from antitoxin is anaphylaxis and that need not occur if the susceptible patient is properly desensitized first. If a patient will react to antitoxin, he will react to one thousand units

quite as severely as to one hundred thousand units. There is a tendency to give children small doses of antitoxin twenty thousand units or less and adults larger doses. Physicians should remember in treating a case of diphtheria they are treating a poison and not a person. A certain amount of toxin is neutralized by a certain amount of antitoxin. Let us consider a hypothetical case. Two individuals are infected with the same amount of diphtheria germs at the same time, the one is a baby, the other a man. There will be equal amounts of toxin in the blood stream of each patient but since there is more than five times the amount of blood in the man than the baby, the concentration of toxin in the blood of the baby will be five times that in the man. Therefore the rational treatment would be to give as large or larger dose of antitoxin to the baby, knowing that even a large dose is harmless.

Twenty-seven percent of cases were not given antitoxin at the first visit of the physician. This indicates a hesitation on the part of many physicians to give antitoxin until they are sure of their diagnosis. The fact that a physician goes to the trouble to take a smear from a throat and send it to a laboratory is *prima facie* evidence that the case, in his opinion, may be diphtheria. Of course some physicians make a practice of taking smears from all sore throats, even those which they do not believe are diphtheria, on the chance that some time the laboratory may pick up a case before clinical symptoms show. Such a practice is to be highly commended. On the other hand there are some physicians who still hesitate to treat a suspicious case until they have a laboratory diagnosis. This is a very dangerous practice and should not be followed. Any case which looks as if it may be diphtheria should be given at once the maximum dose of antitoxin and the smear taken afterward. A positive finding of diphtheria by the laboratory is valuable but a negative laboratory finding should never be given precedence over the clinical diagnosis. All cases suspected of being infected with diphtheria should be treated with one adequate dose of antitoxin *first*, then diagnosed afterward.

This may seem to be elementary stuff to the average physician, but when one realizes that forty percent of the patients dying of diphtheria have received antitoxin in repeated doses, and that twenty-seven percent of the cases did not receive antitoxin at the physician's first call, it is time that these obvious errors are brought home to medical men in a way that shall impress them so they will not forget. If medical men ever hope to get anywhere in the treatment of the acute infections, they must get away from the old-fashioned notions of ancient therapy, namely a teaspoonful of pink water after meals and at bedtime and learn to give potent drugs, early, and in adequate dosage, and then, and only then, can we expect satisfactory results from modern therapy.

What is the remedy for this human factor causing all our errors in the treatment of diphtheria? The answer is obvious and that is immunization of all children against diphtheria at six months of age or as soon after as possible. This remedy, if carried to its logical conclusion, would be absolutely "fool proof," for diphtheria would then cease to exist as a cause of death in this state.

## SPECIAL ARTICLE

### DIPHTHERIA PREVENTION IN INDIANA

WILLIAM F. KING, M.D.

SECRETARY INDIANA STATE BOARD OF HEALTH  
INDIANAPOLIS

The Indiana State Medical Association at the West Baden meeting adopted a resolution introducing a state-wide co-operative effort to inform the parents of Indiana concerning immunization against diphtheria and to urge the protection of all children against this disease. The Association appointed a committee consisting of Dr. C. H. Good of Huntington, Dr. W. H. Stemm of North Vernon, Dr. J. Don Miller of Indianapolis and Tom Hendricks, executive secretary of the Association, to co-operate with the State Parent-Teacher Association and the State Board of Health in carrying out an educational campaign. This committee, together with Mrs. Homer J. Miller of South Bend, president of the State Parent-Teacher Association, and Mrs. Edna Hatfield Edmondson, executive secretary of the State Parent-Teacher Association, met with the secretary of the State Board of Health December 1, to formulate plans whereby the physicians of the state and the local parent-teacher group throughout the state might co-operate most effectively in presenting the importance of protecting children against diphtheria to the parents and others interested. The State Board of Health, through its Department of Visual Instruction, through the Division of Child Hygiene and through the Division of Communicable Diseases had been carrying on educational work along this line, but it was recognized that much more effective work could be had through a concerted effort on the part of physicians, parents and teachers.

At this committee meeting the following objectives were adopted:

1. To secure protection against diphtheria by immunization with toxin-antitoxin of as many children of pre-school age as possible within the state.
2. To secure the interest and active support of all local agencies and organizations—health, social, welfare, religious, civic, fraternal, educational and commercial in the promotion of a state-wide campaign against diphtheria.



3. Through a continuous campaign of information and publicity to convince parents and guardians of the importance of having their children immunized against diphtheria as soon as possible after six months of age.

The following summary of our present knowledge and experience concerning diphtheria and diphtheria immunization was also adopted:

1. *a.* That most infants are naturally immune to diphtheria during the first three months of life, but that this immunity disappears very rapidly.

- b.* That the period of highest susceptibility to diphtheria is from the second six months of life up to the age of three years.

- c.* That susceptibility diminishes gradually as a person approaches adult life, only about eighteen percent of persons of the age period twenty to forty years being susceptible.

2. That although the largest number of diphtheria cases have occurred during the age period of five to nine years, the greatest number of diphtheria deaths have occurred in children under five years of age.

3. That the eradication of diphtheria will depend upon the early immunization of every child preferably at six months of age, or as soon as possible after that age.

4. That the toxin-antitoxin immunization of school children is a step toward the education of parents regarding the harmlessness and efficacy of toxin-antitoxin immunization of children of preschool age.

5. Diphtheria is not necessary. If every child in Indiana were immunized in the second six months of life, diphtheria would be eliminated as a menace to child life.

From the standpoint of the State Board of Health the following report, as to the number of adults and school children who have been reached through the educational work of the department with the results accomplished through the giving of the Schick test and the toxin-antitoxin immunization, will give some idea of the co-operation that is being had from the public generally and demonstrates the fact that the people of Indiana are interested in protecting children against diphtheria. The results so far accomplished are most gratifying and encouraging. With a continuation of the campaign and with the continued support and co-operation of the physicians of the state and of all the agencies and organizations interested in child welfare it is not too much to expect that diphtheria will be practically eliminated as a cause of death and a menace to child life in Indiana within a few years. Since October 11, 1926, and up to March 1, 1927, the State Board of Health, through the Department of Visual Health Instruction, has held a total of two hundred forty-one meetings at which moving picture films, showing the prevention of diphtheria, have been shown to a total of more than fifty-seven

thousand school children and adults. This educational work has been carried out in the following counties: DeKalb, Fayette, Lawrence, Dearborn, Jackson, Posey, LaGrange, Steuben, White, Wayne, Kosciusko, Delaware, Madison, and Ripley. In DeKalb county the Schick test has been given to two hundred and forty-one school children in Auburn and six hundred and thirty-five in the county outside. In Connersville the Schick test has been given to four hundred and seventy-five school children and this work is still going on. In Lawrence county seven hundred and eighty school children have been given the immunization in one school, the Mitchell consolidated school, while three hundred immunizations have been given in the county outside. In Aurora one hundred and fifty school children were immunized, in Seymour one school the Park school, has been completely immunized, while more than six hundred children in the county school have been given the Schick test. The schools of LaGrange in LaGrange county and Pleasant Lake in Steuben county have been completely immunized. In White county the Schick test was given at all schools. Posey county is now completely organized so that the Schick test to be followed by immunization will be carried out in all schools. In Evansville more than five thousand school children have been given the protection of immunization. It is worthy of note that practically all of this work has been done by physicians, both the giving of the Schick test and the immunization. In all cases the Schick testing is being followed up by local physicians and nurses by immunization of the cases giving a positive reaction. The State Health Department does not give either the Schick test or the toxin-antitoxin, but devotes its efforts entirely to educational work and to advising parents to go to their family physician.

In addition to the film showings and talks given on diphtheria immunization the Department of Visual Health Instruction shows films and gives talks on practically every phase of disease prevention. The department has a total of thirty-five moving picture films with portable movie machines and operator. In all this health educational work, however, particular emphasis is placed upon the prevention of diphtheria and upon the importance of periodic health examination. In addition the department carries a health exhibit of posters, charts, circulars and other educational material, which exhibit is made the center of the educational effort. This exhibit is usually placed in the high school auditorium, where it is open to the public and where public meetings are held each evening and at other times as may be arranged by the local committee in charge. Health films are shown, however, in all the schools of the city and in the township schools of the county where their electricity is available for operating the movie machine. The department is carrying out, at the present time, a series of health weeks



under the auspices of the Y. M. C. A. in Richmond, Muncie, Anderson, New Castle and Greensburg.

In addition to the special educational work carried out through the Department of Visual Health Instruction the Division of Child Hygiene is also emphasizing the importance of protection against diphtheria in all mothers' classes, mothers' conferences and throughout the entire field work of this division. In this way the message of "Diphtheria Immunization" is reaching thousands of mothers in the most direct way. The Division of Communicable Disease is also taking advantage of their opportunity to talk "diphtheria immunization" to local parent-teacher groups and other organizations, or public meetings. In fact every speaker, who goes out from the State Health Department to address parent-teachers, luncheon clubs, W. C. T. U. meetings, state conventions and public meetings of all kinds takes advantage of the opportunity to emphasize "diphtheria immunization" and to call attention to the campaign now being carried on throughout the state. In this way thousands of citizens are being impressed with the importance of making every effort possible to eliminate diphtheria.

Quite recently the State Health Department sent out a handsome bulletin on "Toxin-Antitoxin

as a Diphtheria Preventive" to each county, city and town health officer in the state and within a short time will send a copy of the same bulletin to each physician in the state. This bulletin is perhaps the most complete outline of the history of diphtheria and its control that has been made available and will give to the physicians of the state a ready reference on every practical phase of the subject. The bulletin was prepared by the Medical Department of the Travelers Insurance Company of Hartford, Connecticut, as a contribution to the control and elimination of diphtheria.

No progress report on diphtheria control in Indiana would be complete without a reference to the splendid attitude of the medical profession of the state and the fine co-operation shown by the profession in giving time and effort and service to the end that diphtheria, as a menace to child life and child health may be controlled, prevented and ultimately eliminated. An equal tribute is due to the Parent-Teacher Association and in fact to practically every organization of citizens regardless of the purpose of the organization, who have contributed to the success of this educational and child-saving movement. The effort thus far has been so successful that it would seem safe to predict that diphtheria is a vanishing disease in Indiana.

A New York newspaper man in Rome reports that when the King of Italy was signing some state papers, he dropped his handkerchief. Mussolini picked it up and said, "I trust Your Majesty will allow me to keep this as a souvenir."

"I fear not," answered the king. "It is the one thing left which you let me put my nose into."

#### IMPROVED URETHRAL SYRINGE

F. A. Van Buren, M.D., San Antonio, Texas.

Some years ago I devised a long, slender barrel syringe (fig. 1) for treatment of the female urethra. This instrument became very popular and was useful to those doing gynecology and urology. It may be used also as a uterine syringe.

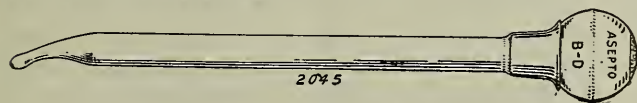


Fig. 1.—Syringe with long, slender barrel.

Recently I devised another model, for the female urethra and bladder only. It has a capacity of about 30 cc. of fluid, a longer curved conical tip reaching the bladder, and eccentrically placed so as not to interfere with a vaginal speculum if used. Slight pressure prevents the return of the liquid (fig. 2).

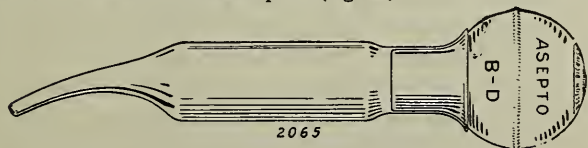


Fig. 2.—Syringe for female urethra and bladder.

These syringes are always in working order; they have the nonfilling bulb, and are easily cleaned and sterilized. They are manufactured by Becton, Dickinson & Co.—(Reprinted by permission of the *American Medical Association Journal*.)

STICKERS with the printed recommendation, "When your baby is six months old have the doctor give toxin-antitoxin to prevent diphtheria" are now supplied by the New York State Department of Health to local registrars to be attached to the notices of birth certification sent to parents of new-born babies. It is thought that in this manner the need for protecting young children against diphtheria will be more forcefully brought to the attention of parents and at a time when they are particularly receptive to suggestions concerning the preservation of the health of their offspring. Our own state board of health might adopt a similar plan.

During the recent session of Congress, 17,800 bills were introduced, 13,251 in the House, 4,549 in the Senate, which breaks the record of the session two years ago, when 13,294 separate bills were proposed. Running debate on the floors of the two houses and speeches printed but not delivered used 13,000 pages of the "Congressional Record." Two years ago, at a comparable session, the "Record" ran a little under 12,000 pages.—*Nation's Business*.

Tommy—"A little bird told me what kind of a lawyer your father is."

Freddy—"What did the bird say?"

Tommy—"Cheep, cheep."

Freddy—"Well, a little duck told me what kind of a doctor your father is."—*Epworth Herald*.



## THE JOURNAL of the

### Indiana State Medical Association

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.  
Editor and Manager

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## EDITORIALS

### DISEASE PREVENTION PRACTICE

In Indiana there is decentralized health authority, which means that local health authorities, county, city and town rather than state are given jurisdiction in matters pertaining to public health. We must therefore look to local health authorities for real and lasting progress in public health work. Local health authorities, however, cannot make progress without straw, nor can results be accomplished without effort and organization. Local health departments to be effective must be sufficiently organized, must have adequate funds and must have the support of a sound public opinion.

Of all the groups making up the public whose support is indispensable to health progress, the physicians are the most influential. Physicians are looked to by the public as authorities on public health matters, so that a word from them can make or break a program for diphtheria control, child hygiene, or any phase of public health service. If preventive medicine is to come out of the pages of pamphlets, popular magazine articles, or the eloquence of lecture platforms and become a reality, physicians must furnish a real public health service to their families and to their communities. Doctors must become scrupulously conscientious in practicing preventive medicine as they are in practicing curative medicine. If every doctor would send the children of his family to the first grade of school protected against diphtheria and smallpox and with all physical defects corrected, so far as possible, this alone would be a tremendous contribution to enlighten public opinion and to the prevention of unnecessary physical inefficiency, ill health and premature death.

As a practical stop in aiding physicians to extend their preventive medical practice it has been suggested to the State Health Department that a card, suitable for mailing, or placing on the table in the doctor's waiting room, would be useful. The suggestion is that a card entitled "Preventive Medicine from Your Family Physician" under the seal of the State Board of Health, stating briefly what may be accomplished through immunization against diphtheria, typhoid, smallpox and scarlet fever, stating the benefits of physical health examination and recommending that those matters be talked over with

the physician, would serve a useful purpose in acquainting the public, and especially parents with this health service. The State Board of Health will be glad to provide such cards if the idea meets the approval of the medical profession. It may be stated that this is not an untried plan, because the plan is now being carried out in the state of Massachusetts with hundreds of physicians of that state using the cards and finding the plan to be quite successful. As a practical method of informing the public of the health service available in the offices of practicing physicians this suggestion certainly is worthy of consideration.

### COMPLETE REMOVAL OF INNOCENT LESIONS

Much has been said concerning the necessity of considering every tumor as being malignant or possessing malignant tendencies until proved otherwise. Recently Dr. J. C. Bloodgood, of Johns Hopkins hospital, has followed up his communications appearing in the *Journal of the A. M. A.* and other publications concerning the danger of incomplete removal of small and apparently innocent lesions by calling upon the medical profession again, through the medium of a circular letter, to pay more attention to this important life-saving recommendation. Dr. Bloodgood very justly says that there is great danger that apparently innocent neoplasms may be incompletely removed by shelling them out or enucleating them, or by removing by blunt dissection, or by cutting the tissue with a knife too close to the capsule or border of the tumor. As an example he points out that he has seen patients with a wen of the scalp that showed no evidence of recent growth that had not been accompanied by pain or tenderness, which upon operation and microscopic examination of the mass presented malignancy. He also points out that there are many tumors which pre-operatively are considered benign which prove to be malignant after the pathologist has made an examination. Tumors that by growth and appearance are diagnosed as fibromatous, not infrequently will be reported by the pathologist to be malignant. In the discussion of this subject, Dr. Bloodgood very logically says: Every physician should know that the object of removing skin lesions and the different types of lesions of the mouth and subepidermal and subcutaneous nodules is to protect the patient from the possible malignant degeneration in such benign localized neoplasms. But at the same time it should be borne in mind that malignant change in the cells present in these local growths may have taken place, so that, if it is not completely removed, there will be local recurrence with great danger of metastasis. Even if the tumor is still distinctly benign and the cells

are as yet histologically benign and physiologically quiescent in their potential malignancy, incomplete removal will be followed by local recurrence of the benign tumor. Thus, the entire object of the operation will be lost and, in addition the second tumor, the descendant of the first, will be potentially more malignant than its parent. We are getting correct information to the public. Most of the lesions of the lower lip, of the mucous membrane of the oral cavity and tongue, the warts, moles and keratoses and other local lesions of the skin, the subepidermal and subcutaneous nodules and tumors, are now well known to the public. They go to their family physicians with curiosity and usually with anxiety as to whether the lesions ought to be removed.

The rule should be this: Whenever any local lesion can be thoroughly and completely removed with a wide margin, that is, margin, wide enough for any type of malignancy which is possible in a local lesion in the specific area, this operation should be done with or without the cautery. There should never be an exception. There is no need of biopsy and, no matter what the section shows, no indication for further local operation. If the local lesion is of sufficient extent to make the complete operation mutilating, then its character must be ascertained at once by frozen section and the indicated operation must follow at once. Better no operation at all than an incomplete operation. Now that patients are reporting in such large numbers with lesions of this character in which the chances of a permanent cure are generally 100 per cent, these chances should not be impaired by an incomplete operation based on the clinical diagnosis of benignancy. A malignant growth in its earliest stages has no more definite symptoms than pregnancy in the early days.

#### OPERATING FOR A RECORD

While visiting a French hospital recently the editor of *THE JOURNAL* was informed that the surgeon-in-chief of that hospital had not lost a case of appendicitis in the previous ten years, though operating for this affection about as often as the ordinary busy city surgeon. In explanation it was said that the surgeon in question will not operate any case of appendicitis unless the operation can be performed during the first twenty-four hours after the onset of the trouble. If seen later the case is treated by non-operative methods until the acute symptoms subside and then the case operated in the quiescent stage. When asked if the appendicitis cases all went to interval operation the information was volunteered that if the case went on to peritonitis or a ruptured appendix the members of the house staff of the hospital were permitted to assume the burden of the case. In other words, the surgeon-in-chief "side-stepped" when there was a possibility of marring his operative record. To our

notion such conduct is worthy of severe censure, for it amounts to moral cowardice. It is no better than the conduct of the man who does commercial operating for the sake of the fees, irrespective of indications, whether influenced by his satellites who expect a division of the fee, or does it independently for personal gain. We have reason to believe that there are quite a number of prominent surgeons in America who operate for a record with its attending inference of superior skill and judgment, and hesitate or refuse to operate on those cases which have the potential possibilities of turning out badly even though it is morally certain that operation is the only hope of saving the life of the patient. Such men should be branded in their true colors as selfish opportunists, working only for their own advancement and profit, and with no regard for the health or lives of many luckless patients who may fall into their hands. The man who will not help to save a drowning man deserves no severer condemnation and punishment than the surgeon who refuses to operate a case in which surgery alone offers hope of relief but perhaps at the risk of destroying a dearly prized operative record. If a patient has any kind of trouble for the relief of which surgery seems to be the only rational treatment to employ, that patient deserves operation at the hands of a skilled surgeon, no matter if he has only one chance in twenty of being cured as a result of the operative interference. He is entitled to that one chance, and the surgeon who would deny him that one chance deserves to be driven from the medical profession. Such a surgeon is far more dangerous than the fee-dividing surgeon who operates everything that comes to him because it means pecuniary gain.

#### EDITORIAL NOTES

DEAR DOCTOR:

*THE JOURNAL* and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in *THE JOURNAL*, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask *THE JOURNAL* about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want *THE JOURNAL* to serve you.

If your medical society dues for 1927 are paid you are in good standing. If not paid, you are delinquent and not entitled to any of the advantages and perquisites which go with full membership in our association.

DURING the past few months much has been accomplished in the prevention of diphtheria in



Indiana by immunization, but much more will be accomplished in the future if every medical man in the state will interest himself in the campaign and generally advocate and employ diphtheria immunization. It is possible to wipe out diphtheria entirely, but such a result will require the co-operation of both physicians and public.

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It is not too early to call attention to the advisability of testing out our hay-fever patients with a view to determining the actual irritant responsible for the annoying symptoms, and then introducing the proper specific treatment therefor. We are not going to go so far as to say that hay-fever is entirely a curable disease, but we do claim that a very large percentage of hay-fever cases can either be cured or very greatly relieved by appropriate treatment with biological products.

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In the April number of *THE JOURNAL* we gave the name of Frank W. Cregor, M.D., as chairman of the legislative committee of our Indiana State Medical Association. This was through force of habit, in view of the fact that Dr. Cregor so long served as chairman of the committee in question. The present chairman of the committee is E. R. Zimmerman, M.D., of Elkhart, and he deserves the credit that goes to the chairman of that committee. The whole committee deserves unstinted praise for what was accomplished.

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A BOOKLET entitled "Toxin Antitoxin as a Diphtheria Preventive," published by the Traveler's Insurance Company, is being distributed widely throughout Indiana and this work is augmenting the work that is being done by the medical profession and the public health authorities of the state. The Parent-Teachers Association of Indiana is giving its support to this campaign, and we earnestly urge every medical man, whether he is a health officer or not, to assist in this very worthy effort to wipe diphtheria out of the state.

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A NUMBER of county medical societies sent representatives to Indianapolis during the legislative fight, and paid the expenses of the representatives. That is a sensible way of aiding our legislative committee in efforts to secure rational medical legislation. It is very unfair to expect any of our confreres to leave their professional work at their own expense to help in gaining something that is of benefit to all. It is a great sacrifice for any busy professional man to leave his work to fight for something for the common good, and he should not be asked or expected to go down in his pocket to pay actual expenses for hotel bills and traveling.

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WELL, fishing time will soon be here, and many a doctor is beginning to put his rod and reel in shape for the time when the law permits him

to fish lake or stream. Vacation period is a national institution with a majority of our inhabitants, but we are sorry to note that some doctors have a mistaken notion that they cannot get away from their professional work long enough to take rest and recreation so much needed. No doctor ever lost anything in the long run by taking regular vacations. Pleasure should not interfere with business, but, on the other hand, neither should business interfere with a certain amount of pleasure. There is a happy medium.

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THE daily press announces that the Church Service Association, a recently formed organization to aid authorities in enforcing the prohibition law, plans to have a member in every block in the city to check up on any neighbor who violates the law. It is expected that this elaborate spy system will be a definite aid to prohibition enforcement. However, we are inclined to believe that it will stir up a lot of trouble and enmity between neighbors and friends. We also are inclined to believe that it will result in generating a lot of persecution and perhaps prosecution to satisfy personal spite. Last but not least, we do not think that churches should engage in any such spy system as proposed. They have a higher and more honorable mission than that.

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ULTRAVIOLET and infra-red rays are the only ones invisible to the human eye. According to the *Scientific American* it is now proposed that infra-red rays, thrown from a projector, or search light, be used in war to make the enemy secretly visible at night, and by a special apparatus made visible to the eye of the operator. By this means, attackers who apparently are in complete darkness to the human eye, would be brilliantly illuminated by the infra-red ray, and the view made visible on the special receiving screen. In medicine and surgery the infra-red rays are credited with having preventive and soothing effects upon the human organisms. Perhaps in time of war we may eventually find the infra-red rays useful in putting the enemy to sleep or at least quieting their angry passions. Who knows?

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THERE seems to be some difference of opinion among the members of the medical profession of Indiana as to just how beneficial and effective the new medical law will prove to be. Time will tell. Anyway, we are as well off as we were before, for we might as well not have had any medical law as the one that was on the statute books prior to the last session of the legislature, and which never could be enforced. If anyone and everybody can practice medicine in Indiana now it will be no different than it was last year, or several years before. In the meantime it doesn't help matters any to stir up discussion and point out evidence of disagreement of opinion in

the medical profession. The people of Indiana may not now be protected from conscience-less quacks and medical pretenders, but they certainly are no worse off than they were prior to the session of the last legislature.

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SOUTHERN floods offer an example of the estimate placed upon the services of physicians. Does the Red Cross or the people call for Christian Scientists, chiropractors, or any of the medical pretenders when there is a great catastrophe and sickness and injury are to be given attention. Emphatically, no! Those wanted and demanded at such times are regular physicians who have been educated and trained in all that embraces the science and practice of medicine according to higher standards. No healers, pretenders, or medical jugglers of any type are wanted nor will they be tolerated. The experience should be enlightening to the public in general, and to our legislators in particular who are asked to pass laws to protect people from the injustices surrounding the licensure of the illy qualified and illy trained who are asking to care for any phase of sickness or ill health.

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A STUDY of the Indiana mortality and morbidity rate as it pertains to diphtheria definitely points out, as the secretary of the Indiana State Board of Health well says, that, first, in some way parents should be impressed with the importance of calling a physician promptly in every case of sore throat; second, the physician should administer an adequate initial dose of antitoxin at the earliest opportunity in every case where there is any possibility of the case being diphtheria; third, that physicians should get away from the method of using repeated small doses of antitoxin; fourth, that antitoxin should be given promptly in adequate doses in every case without waiting for a laboratory report. To this we might also add that diphtheria may be driven out of the state entirely if physicians and parents in co-operation will see that every child is given diphtheria immunization through the administration of toxin-antitoxin.

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THE council on Physical Therapy is functioning. Recently it has taken action on the sale of ultraviolet generators to the public. The Council condemns the sale, or the advertising of the sale, direct to the public, of a generator of ultraviolet energy, and declare inadmissible for inclusion in its list of accepted devices for physical therapy any apparatus manufactured by a firm whose policy is in this matter detrimental to the public welfare. In condensed form, the condemnation is based upon, first, the public could not take proper precautions in administering treatments; second, the public is likely to place unwarranted confidence in the therapeutic value of such things, as the result of false claims made by manufac-

turers; third, possession of such therapeutic means has tended to encourage self-diagnosis; fourth, the sale of useless and fraudulent lamps would be encouraged, and the public would have no means of determining the quality or quantity of the rays emitted.

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LONDON and other English newspapers are now publishing rather lengthy articles concerning what has been termed "a new wonder of British surgery" called "sawing the eye for the relief of pressure." The papers go on to describe rather fully and with considerable detail the well-known operation of trephining for glaucoma, an operation that for several years has been used successfully in the United States and in fact all over the world. Just why the lay press should have considered trephining the eye as something new and original is beyond our understanding, unless the physicians or hospital interns, probably the latter, furnished the data, with the omission of the fact that the operation is not new. The unfortunate feature of the discussion is the reference to English surgeons as being the only ones doing the operation and the reluctance with which German ophthalmologists tried the operation and then abandoned it as not superior to other forms of operation or treatment.

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WE have a letter advocating that doctors should charge their professional brethren one-half of the usual fee charged laymen when services are rendered, and that the collected fee be turned over to the Physicians' Home. While we do not believe that this suggestion will be followed, yet it is our opinion that if doctors are going to charge one another for professional services rendered it would be a good plan to have the fees so paid turned into a fund for the creation of a library, or the procurement of a place of meeting for the local medical society, or even given to some worthy charity. On the whole we are not in sympathy with the idea that doctors ever should pay for professional services rendered by a confrere, except in those instances where a doctor is asked to put himself to considerable inconvenience, loss, and expense in doing professional work for a confrere, in which case some effort should be made to reimburse him. We are apt to consider that it is a compliment to be selected to attend a confrere. When it comes to charging a fee we should remember that there should be no "dog eat dog" attitude.

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WE hear much complaint about "doctors not taking their own medicine," and it occurs to us that the complaint is quite justified when we consider that a goodly percentage of our profession does not practice what it preaches as to disease prevention and eradication. It would be interesting to know just how many doctors have a periodic health examination themselves, and how



many of them send their own children to school with the knowledge that the children have been immunized against diphtheria, typhoid, smallpox and scarlet fever? If doctors are going to be careless in adopting immunization for themselves and their families, how can they expect the public to adopt immunization? Suppose we start right now to make a record and then inform the public, through the lay press, just what percentage of our profession is following the advice so generally given concerning disease prevention and eradication. It would be a great step toward the creation of confidence on the part of the public in what we are advocating if we can say that physicians generally are "taking their own medicine," and it would be a blow to the anti-vaccinationists and all of their ilk who fight preventive measures.

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A MEMBER of the Indiana State Medical Association writes us as follows:

"I wish to congratulate you upon the monthly issue of our very valuable State Medical Association Journal. I impatiently await the succeeding issues and regard our Journal as the peer of any medical journal in print. You have had something to say in this month's issue regarding collection agencies. Whenever a collection agency representative comes into my office for business it angers me, as I have had many unfortunate experiences with such fellows. Now, in order to avoid talking to them I simply hand a form letter which reads as follows:

"My Dear Sir: You say you represent a collection agency. Inasmuch as during the past thirty-five years I have had repeated experiences with collection agencies, all of which have been very unsatisfactory to me, I wish to say to you frankly that if you expect to talk collections to me the place you occupy in my office is more valuable to me than your presence. Please take your departure, or in case you have other business with me you may remain, but don't mention collecting agencies to me again. May we part in good humor but with this clear understanding."

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ONE styling himself "Dr. Frank McCoy, health specialist," and hailing from California, is attempting to inflict himself upon Indiana through the medium of health advice of the pseudo-scientific type, and several newspapers have been tempted to exploit him in that capacity. McCoy is not a physician, but does have a diploma from a chiropractic school which, from the standpoint of trustworthy health advice, means absolutely nothing. Much of the piffle that he gets rid of shows evidence of coming from an ignoramus, but the lamentable part of the whole thing is that some of the advice is terribly dangerous, and the newspapers ought to be in better business than exploiting him. For instance, when McCoy says

that cancer can be cured by fasting, it is time to call a halt upon the circulation of such dangerous advice. The reputable members of the medical profession in every community of the state should take the trouble to place in the hands of the newspapers of their several communities a reprint of an article concerning McCoy and his dangerous teachings which appears in the April number of *Hygeia*. Already one leading newspaper of Indiana has stopped advertising McCoy after being placed in possession of the facts concerning him.

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DURING the recent session of the Indiana legislature various interests spent large amounts of money in an endeavor to influence legislation. The medical bill alone was an expensive piece of work. The Indiana chiropractors association is credited with spending a little over four thousand dollars, but in all probability that which was spent directly and indirectly by the chiropractors amounted to a very much larger sum. The same is true of the Naturopaths, who are credited with spending less than a thousand dollars, but who probably spent a good deal more. The League for Medical Freedom undoubtedly spent a considerable sum, and even our own Indiana State Medical Association was obliged to spend a limited amount of money to cover expenses of those who worked in the interests of the bill. The unfortunate part of this question of securing intelligent action upon any kind of legislation is that oftentimes the faction spending the largest amount of money is the one that secures the result. It seems like a pathetic admission of weakness to credit the securing of any legislation to the work paid lobbyists, rather than conscientious and analytical consideration of the merits of any bill by the legislators who are charged with the burden of passing upon it.

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FOR several months we have been hearing through the newspapers and otherwise that the State Board of Health is not functioning well as a direct result of internal strife. We are not going to comment on any of the merits or demerits of any of the contentions or personal animosities that may be hampering the board in rendering the most efficient service to the state, but we offer the suggestion that the governor of the state should notify the members of the State Board of Health individually and collectively that they must get down to business as a unified and harmonious body or get out. There is no excuse for a continuation of the wrangling among the board members that seems to have existed for several months. Petty quarrels, personal peevishness and ambitions will prevent any board from functioning properly, and they have no place on the Board of Health. If the governor does himself justice, and at the same time considers the best interests of the people of the state who are vitally

interested in public health matters, he will at once take prompt and energetic measures to establish peace and tranquility in the Board of Health and a desire on the part of every member of the board not only to function, but function intelligently and effectively in the interests of the people. The people have heard enough about wrangling in the State Board of Health.

WE urge every Indiana physician to read Dr. Lee's article on diphtheria mortality in Indiana which appears in this number of THE JOURNAL. At the expense of repetition, we desire to emphasize what he says near the close of his article:

"Any case which looks as if it may be diphtheria should be given at once the maximum dose of antitoxin (from thirty to fifty thousand units.—Ed.), and the smear taken afterward. A positive finding of diphtheria by the laboratory is valuable, but a negative laboratory finding never should be given precedence over the clinical diagnosis. All cases suspected of being infected with diphtheria should be treated with one adequate dose of antitoxin *first*, then diagnosed afterward." As Doctor Lee well says, "This may seem like elementary advice to the average physician, but when one realizes that the records show that forty per cent of the patients dying of diphtheria have received antitoxin in repeated doses, and that twenty-seven per cent of the cases did not receive antitoxin at the physician's first call, it is time that these obvious errors are brought home to medical men in a way to impress them so that they will not forget. If medical men ever hope to get anywhere in the treatment of the acute infections they must get away from the old-fashioned notions of ancient therapy, namely, a teaspoonful of pink water after meals and at bed time, and learn to give potent drugs early and in adequate dosage, then and only then can we expect satisfactory results from modern therapy."

FOR a long time we have been calling attention to the unreliability and even crookedness of the average collection agency. Perhaps there are some agencies that are on the square but such are few and far between. Even an agency that as an organization attempts to play fair may be obliged to suffer from the trickery of its agents. In spite of all we have had to say concerning this matter we still are hearing of doctors in Indiana who have been foolish enough to sign bloodthirsty contracts with certain collection agencies and learn very soon to regret the action. Even since the publication of the April number of THE JOURNAL in which we tried to influence the medical men of Indiana not to be taken in by the specious argument of any collection agency, we learn that one or two Indiana doctors have been roped in by collection agencies having offices outside of the state and are paying a dear penalty for the experience. Is it any wonder that doctors

have the reputation of being easy marks? Why in the name of common sense should any doctor sign a contract with a collection agency without reading the contract carefully and analyzing its various features. As a precautionary measure it wouldn't be a bad idea to have the contract scanned by a good lawyer, banker or investment broker before attaching a signature to it. The wise doctor will sign no contracts of any kind without being definitely sure of his ground, and we might add as a personal opinion that any doctor who signs a contract with or places collections with a collection agency with offices outside of his immediate vicinity is running a very great risk of being beautifully "trimmed."

WE have no sympathy for the type of pacifism that is being preached in this country. We are in favor of disarmament if the other nations will join us in it, but there is no logical reason why we should cripple our defense and put ourselves in a position of being an easy prey to covetous nations. Our standing army is now less than 100,000, and at that it is not in a very good state of preparedness. Practically all of the other large nations have standing armies of large proportions, and right at the present moment it is admitted on all sides that any one of the great European powers can place an army of one million men in the field within twenty-four hours. Furthermore, all of the large nations are endeavoring to create a reserve force. This is particularly true with France, Italy and Germany, who have compulsory military training. In addition to this there are any number of volunteer training camps in Europe that are established and conducted for patriotic purposes, but not through support of the governments. Here in the United States we have citizens military training camps, and aside from offering a wonderful opportunity for the display of loyalty they are furnishing physical training, improved general health, and character building through discipline, as a result of good food, regular hours, medical supervision, exercise, etc., while at the same time being valuable in furthering the cause of preparedness. As idiotic as it may seem, there are many people in this country who are opposed to these military training camps. We believe that it is a duty of the members of the medical profession not only to support these camps by patronizing the camps themselves, but to urge the public to give hearty co-operation and support of an enterprise that is of such vital importance to our country.

SIR JAMES PARR, high commissioner for New Zealand, in responding to a speech of welcome in London, said that the United States and Great Britain should draw closer together in affairs affecting both nations, and that the first necessity was to get the young people of Great Britain and



the United States attuned, while still in their schools, to the idea that world peace could be achieved by closer co-operation between their two countries. He said that if the right atmosphere were created in the schools the next generation would see a very fine understanding between the two peoples. He also pointed out that the tie that binds the United States to Great Britain was not primarily race, but language, and he made a plea for an effort to preserve the purity of the English tongue. He paid the United States a compliment by admitting that pure English is spoken in many localities in this country, which is something not admitted by many English writers who seem to think that the only place pure English can be spoken is in England. Concerning this matter we are reminded of a story, said to be actually true, of an American traveling in Italy who, tired of hearing so much foreign language, seemed pleased to run across an Englishman, to whom the American introduced himself by saying, "I think we speak the same language." To which the monocled Englishman replied, "Not the same, my dear sir, but somewhat similar." This suggestion concerning the cultivation of pure English is worth considering, but England as well as the United States will have to clean house, for there is just as much mongrel English spoken in the British Isles, and especially in London, as there is in any part of the United States. In fact, it is difficult to understand and follow the colloquial English as it is to understand a foreign language. So the United States cannot be accused justly of having any monopoly on hybrid English.

LUNCHEON clubs, like the Rotary, Kiwanis, and others of similar character, seem to be a fertile field for fakers and demagogues for the purpose of spreading misleading and dangerous propaganda of one kind or another. We have had occasion to call attention to one Paul O. Sampson, who should be barred from speaking engagements in Indiana, and in this number of THE JOURNAL we call attention to the efforts of one styling himself "Doctor Frank McCoy," who right at the present moment is trying to break into Indiana through the newspapers and perhaps engagements before the various luncheon clubs. Still another propagandist is headed toward the west from New York, and in his speeches he makes a plea for long life and an increase in physical and mental power through the influence of treatment at the hands of an endocrinologist. To program committees of these luncheon clubs the subject of a talk is offered, having the alluring title of "Why Not Live to be 150??" The speaker, if given an opportunity to be heard, dwells upon the announcement that our physical and mental faculties depend upon the endocrine glands, and that these glands may be stimulated to function for a great deal longer

time than usual if given appropriate attention. Adroitly the speaker also calls attention to the stimulation of the sexual functions through a similar process, and announces that regeneration of the sexual organs goes along with the rest. Of course this sort of bunk is very apt to find many men of failing sexual energies keen to try rejuvenation, and as a perfectly natural sequel to the receipt of this advice they consult the speaker who has painted such a rosy picture. Post haste the propagandist either admits that he can be of service, or that he can put the aspirant for renewed sexual power into the hands of an expert who will deliver the goods. Needless to say this whole business is fakery pure and simple, and luncheon clubs should steer clear of any and all of these health propagandists who have no scientific standing. Physicians who belong to these luncheon clubs ought to use their influence to prevent the exploitation of these health propagandists.

IN the *Journal of the A. M. A.* for February 12, 1927, Dr. W. A. Pusey, ex-president of the A. M. A., has a short article concerning the disappearance of doctors from small towns and their replacement by irregulars. The conclusions drawn are from a study of the A. M. A. directory for 1914, and then eleven years later, or 1925. Dr. Pusey's analysis seems to show that as you increase the standards as well as the cost of medical education you diminish tendency on the part of physicians to go to the smaller communities where remuneration is less. He then concludes by saying that the "distribution of physicians is controlled by simple economic principles which apply to all commodities, namely, as you increase cost you restrict distribution. This applies to medical education as follows: As you increase its cost you rapidly diminish the number of persons able to obtain it. In medical service it acts as follows: As you increase the cost of the license to practice medicine you increase the price at which medical service must be sold and you correspondingly decrease the number of people who can afford to buy this medical service." A similar analysis of conditions leads some writers to consider not only the probabilities but the advisability of establishing state medicine, under the terms of which it would be possible to supply physicians to rural communities at public expense, and with attainments practically equal to the attainments of those assigned to the city. The whole question of ever-increasing cost of medical education and the increase in exactions governing the practice of medicine, with remuneration not keeping pace, has many angles for consideration. One solution of the problem would be to put forth an effort to educate the public in the smaller communities to the all-important fact that medical men must be paid adequately for their services. As compared to cities, the smaller



towns have few poor and scarcely no destitute people who are objects of charity. On the other hand, the moderately well-to-do in the smaller towns have drifted into the habit of not paying or expecting to pay medical men in their immediate vicinities decent compensation for professional services rendered. Perhaps this, in part, is due to the failure on the part of medical men to demand their just dues, but the condition exists and must be met. We are now of the opinion that state medicine with its tendency to pauperize the people is not the solution of the problem.

THE old saying, "A little knowledge is a dangerous thing," is exemplified in the practice of medicine very frequently. Illy trained and poorly educated men attempt that which should be left to those better fitted for the work. A physician may be splendidly equipped in every way to do a certain kind of work but very poorly equipped to do anything else. He may be a splendid general physician or laboratory specialist but totally unfitted for any other branch of medical practice. No physician has any moral right to attempt work for which he is not fitted by education and training. This applies to anything in the whole domain of medicine and surgery. It applies with particular emphasis in those complicated conditions which require the services of a specialist. We have no fault to find with the young medical graduate, or the old one either, who devotes special study and training to any branch of major surgery, but for the man who does not follow this course it is nothing short of criminal for him to undertake technical work in complicated and serious conditions without being educated and trained to handle such cases intelligently. It is granted that even the best of surgeons may make mistakes or be guilty of errors of judgment, but if they with their training and experience make mistakes, or are guilty of errors of judgment, how much more likely, yea, a hundred times, is the mediocre man to be guilty of the same offense. It is commendable on the part of any physician to desire to increase his efficiency by study and experience, but he ought to consider the dangers of the superficial training that is so common today and which is offered so alluringly by educational institutions and especially by various commercial enterprises. Right now we have the spectacle of an instrument house urging general practitioners of medicine to buy microscopes and offering to train men through a few mail-order lessons, supplemented by charts, to make bacteriological examinations and diagnoses. If a positive and easy bacteriological diagnosis can be made after taking such a superficial course as advertised, what is the use of having experienced and well-trained bacteriologists who have devoted years to the work before they have felt competent, and even then find conditions that puzzle them. The fact of the matter

is we are suffering altogether too much from the work of pseudo-bacteriologists and pathologists who with superficial training and experience presume to pass final judgment upon conditions that should and do require the services of an expert.

WHAT a pity it is that public health or sanitary problems of vital importance to the general public cannot be discussed on merit and without political or personal bias or animosity. As a concrete example we refer to the controversy that has waged for years concerning the question of how to secure an adequate and safe supply of drinking water for the city of Fort Wayne. For many years the city has secured its water supply from wells, and not infrequently the supply has been inadequate and so contaminated that the health department has issued warnings that the water should be boiled before use. Increasing the number of wells to meet the rapid increase in population has done little toward doing away with the frequent shortages, and most of the efforts to prevent contamination have been futile. Many years ago sanitary engineers recommended the establishment of a filtration plant, with a view to tapping an inexhaustible supply from neighboring lakes and rivers, but the politicians and the demagogues prevented the acceptance of this plan and they have continued to wield such an influence that the less thoughtful and more ignorant, making up a majority of the voting population, have defeated all efforts to change the situation. At best the water from wells is so hard that it is rarely fit for domestic use, and it is ruinous to boilers, water pipes, and machinery with which it comes in contact for any prolonged time. Contaminated as it is so frequently it becomes necessary for the health department to have almost a standing order to boil the water before using it for human consumption. If there is a dry spell during the summer, or there is any unusual demand for a quantity of water, the residents are warned, under penalty of arrest and fine, that they must conserve the water supply. No insurmountable difficulties would be encountered in obtaining an inexhaustible supply of water close at hand, and the installation of an approved filtration plant would insure purity, but the politicians and the demagogues argue to the masses that such a procedure would result in private interests making some money, as they also unfairly and dishonestly state that purification of the available water supply is an impossibility. Such a condition of affairs will continue to exist until some kind of calamity, with perhaps great loss of life and property, forces the city to do, at an enormous expense, that which could and should have been done several years ago at comparatively small money outlay. At present there are some indications that in the near future the influence of the various civic organizations that have been springing up will be sufficient to



counteract the baneful influence of ignorant politicians and demagogues who poison the minds of the masses among the voters to the detriment of the public weal. The lamentable feature of the whole business is that a matter of such vital interest to the health, prosperity, comfort and convenience of the people as a whole must be subservient to the influence and wishes of a few politicians and demagogues who are actuated by selfish motives.

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A VERY competent surgeon advises a patient with recurring attacks of appendicitis to have an appendectomy. A general physician who is "not in on the deal" advises against the appendectomy, and suggests x-ray and ultraviolet light therapy which he claims to be able to give. Result: Patient wastes a hundred dollars on useless and fruitless treatment, and finally succumbs to an appendectomy and is cured.

An unmarried woman consults a surgeon for a slowly increasing tumor of the abdomen. She is told tactfully that she is pregnant, but she gets peeved and goes to a rival surgeon who recommends her to a general physician for internal medication. Still later she goes to another surgeon who diagnoses an abdominal tumor, operates, and discovers that the tumor is a fetus, but he admonishes his assistants to say nothing about the true nature of the tumor.

A patient suffering from simple glaucoma is told by a competent oculist that the trouble is glaucoma and an operation is advised. Another physician of less training and experience makes a diagnosis of failing vision due to cataractous change in the lenses, and tells the patient to forget all about the trouble until vision is gone, and then seek an operation for lens extraction. Eighteen months later the patient reappears in the office of the first consultant and is found to have gone slowly blind from the glaucoma, and no possibility of restoring the vision by any kind of operation or treatment.

A patient suffering from obstructed breathing is told by a competent rhinologist that there is a marked deviation of the nasal septum requiring correction through resection. Not being especially pleased with the advice given, the patient consults another specialist who advises a simpler operation and proceeds to attempt to increase the breathing space by removing all of the inferior turbinate on each side. Several months later the patient returns to the first specialist for the septal resection indicated in the first place, but aside from the septal deformity presents an atrophic condition with dryness, scabbing of the nose, and general disturbance of the nervous system in consequence of the removal of the functioning turbinates which no amount of treatment will relieve.

A patient suffering from severe headaches, occasionally jaundice and digestive disturbances,

is told by a surgeon that operation for gallstones is indicated. No x-ray examination is made. On operation no gallstones are discovered but the patient is kept in ignorance concerning the findings. Later a good internist pronounces the case as one of Bright's disease of long standing.

A patient suffering with more or less persistent vomiting has prolonged treatment and three operations without relief. Finally, a blood examination results in a report of a four plus Wassermann, and the patient makes a prompt and uneventful recovery under anti-syphilitic treatment.

Incidents like these could be cited until the tale is almost endless. The point to be made is that education, training and honesty is needed in order to diminish the number of such occurrences. It is true that these occurrences are limited, as compared to the vast number of cases in which the highest quality of skill and judgment are employed in connection with unquestioned integrity on the part of the physicians consulted, but we do have enough of the kind mentioned to cause us to pay some attention to it rather than overlook it on the ground of professional ethics or protection to the ignoramus or knave. The public, too, is entitled to careful, conscientious and intelligent attention from the members of the medical profession, and to be protected from the impositions practiced by those few members of the medical profession whose principle interest in the case depends upon the pecuniary consideration involved. There are both ignoramuses and knaves in every profession, but that does not relieve us of the duty of purging our profession of the undesirables as much as possible, and the younger men of our profession should receive encouragement in their efforts to play the professional game fairly and honorably.

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## DEATHS

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L. C. CLINE, M.D., of Indianapolis, died in St. Augustine, Florida, March 28, aged seventy-six years. Doctor Cline had retired from the active practice of medicine. He graduated from Jefferson Medical College of Philadelphia, in 1879.

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BARCLAY O. WHITE, M.D., of Wolcottville, died March 22, aged fifty-four years. Doctor White graduated from the Kentucky School of Medicine, Louisville, in 1902. He was a member of the Lagrange County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

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N. T. HALE, M.D., physician at the Indiana State Home for Feeble-Minded Youths at Fort Wayne, died March 25, aged sixty-two years. Doctor Hale graduated from Rush Medical College in 1886. He was a member of the Indiana

State Medical Association and a Fellow of the American Medical Association.

J. W. BILDERBACK, M.D., of New Haven, died March 31, aged eighty-two years. Doctor Bilderback had been a practicing physician at New Haven for sixty-three years. He was a veteran of the Civil war.

J. F. SMITH, M.D., of Brazil, died at Martinsville, April 9, aged sixty-eight years. Doctor Smith graduated from the Central College of Physicians and Surgeons, Indianapolis, in 1886. He was a member of the Clay County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

### NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

W. C. CHAFFEE, M.D. of Huntington, celebrated his ninety-second birthday April 2.

DR. D. C. BAKES, of Carrollton, and Miss Cordelia Bowie, of Chattanooga, Tennessee, were married March 21st.

DR. C. R. LONG, of Pierceton, has returned home after having spent several weeks in Florida and other places of interest in the south.

C. E. SEYMORE, M.D., of Wawaka, celebrated his eightieth birthday in March. He still is engaged in the practice of medicine, which he began more than sixty years ago.

THE one hundred nineteenth semi-annual meeting of the Union District Medical Association was held at Hamilton, Ohio, April 28th. Papers were presented by Drs. L. H. Schriver, of Cincinnati; H. R. Huston, Dayton; Merle Flenner, of Hamilton, and C. C. Fihe, of Cincinnati.

THE Muncie Academy of Medicine held its regular meeting April 22 at the Hotel Roberts. Dr. Virgil E. Simpson, of the University of Louisville School of Medicine, Louisville, Kentucky, presented a paper on "Management and Treatment of Diabetes Mellitus."

DR. M. F. STEELE, of Fort Wayne, has been re-elected president of the Indiana section of the American Hospital Association. Other officers are: Robert E. Neff, of Indianapolis, president-elect; Dr. William M. Reser, Lafayette, vice-president, and Miss Gladys Brandt, Logansport, treasurer.

THE Hospital Clinical Congress of North American will be held at Milwaukee, Wisconsin, from June 20th to June 24th, 1927, under the auspices of the College of Hospital Administration of Marquette University. The twelfth annual convention of the Catholic Hospital Association of the United States and Canada will be held coincident with the Hospital Clinical Congress. Headquarters will be in the Milwaukee Auditorium. For complete information address the College of Hospital Administration, 124 Thirteenth street, Milwaukee, Wisconsin.

THE United States Civil Service Commission announces that hospitals of the United States Veterans' Bureau and the United States Public Health Service throughout the country are urgently in need of senior medical technician (bacteriology); medical technician (bacteriology); senior medical technician (roentgenology), and medical technician (Roentgenology), and that applications for the positions will be received until the close of business on June 30, 1927. Applications will be rated currently as they are received and certification of eligibles will be made as the needs of the service require. Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C.

The United States Civil Service Commission announces open competitive examination for occupational therapy aide (arts and crafts); occupational therapy aide (trades and industries); occupational therapy aide (general agriculture); occupational therapy aide (poultry raising), and occupational therapy aide (gardening). Applications for the positions named above will be rated as received by the Civil Service Commission at Washington, D. C., until October 31. The examinations are to fill vacancies in the Veterans' Bureau throughout the United States, and in positions requiring similar qualifications. Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C.

FOR the Washington meeting of the American Medical Association, the Pennsylvania railroad has arranged for the operation of extra Pullman sleepers to run through from Indianapolis to Washington, D. C., on "The American," leaving Indianapolis at 2:36 p. m. on Sunday, May 15th, arriving in Washington at 10:20 a. m., Monday, May 16th. Pullman lower from Indianapolis will be \$7.50, upper \$6.00, drawing room \$27.00. For this meeting the Central Passenger Association has granted a rate of one and one-half fare for the round trip on the certificate plan. Going tickets may be purchased from May 12th to and including May 18th, at which time the ticket



agent will furnish a certificate receipt to purchaser. These certificate receipts must be turned in at Washington and will entitle the holder to purchase a return ticket at one-half fare provided 250 are in attendance at our meeting. Requests for sleeping car accommodations should be addressed to Mr. J. C. Millspaugh, Division Passenger Agent, Pennsylvania Railroad, 610 Kahn building, Indianapolis.

There also will be special service over the Big Four to Cincinnati and the C. & O. railroad to Washington, leaving Indianapolis at 6:15 p. m. on May 14th and arriving in Washington at 4 p. m., May 15th.

G. W. H. KEMPER, M.D., of Muncie, Indiana, has prepared and turned over to the association headquarters an alphabetical list of contributors to the transactions of the Indiana State Medical Association from the beginning of the association in 1849, to 1907, the year the transactions were discontinued.

Dr. Kemper has taken infinite care in collecting this data and arranging it in a manner for easy reference. The booklet has been placed in the safe at headquarters along with copies of all the old transactions.

As an introduction to the index, Dr. Kemper has written in his characteristic style the following:

"As there are not more than two or three complete files of the transactions of the Indiana State Medical Society known to be in existence, the work possesses a rare value. Fire and the ravages of time might easily annihilate these almost sacred writings. For this reason alone it would seem wise to preserve in a fitting memorial volume the names of the contributors of articles as well as the titles of the several papers and reports contributed.

"In these pamphlets and volumes—fifty-eight in number—extending from 1849 to 1907 inclusive, is a treasure of medical lore that the present and coming generations of medical men will do well to care for tenderly. They reach back to a period antedating our state medical journals, and I am inclined to the opinion that the early transactions were the first medical publications in bound form issued in Indiana.

"The men who contributed the earlier articles to these transactions have fallen asleep, and we will read no new articles from them. They were not ignorant, but observant and thinking men. They recorded facts that daily fell under their observation, and facts are always valuable.

"Occasionally some of these writers would theorize and draw wrong conclusions, but when they detailed facts and history, their contributions stand as valuable work. Science comes along and pushes theories out of the way, but science never destroyed a fact, nor disturbed correct history.

"A few things in these transactions are not worth a reading at the present day, except as a curiosity, but all that has been written concerning biography, history, epidemics and clinical cases, is well worth a reading in the twentieth century. I will venture a suggestion, namely, that a selection of articles from the transactions, relating to the biography of early Indiana physicians, history of our primitive epidemics, details of pioneer medical practice, clinical cases, etc., might well be selected for publication in a volume as a contribution of medical literature for our State Centennial.

"It seems eminently proper that the names of authors, as well as the titles of their papers should be preserved. In accordance with this idea I have prepared, with care and much labor, an alphabetical list of every name, title of paper, with year and page in volume where they may be found and consulted. As far as I have been able, I have secured the first and correct name of the author, residence, year of birth, and death, if not living. The names are all preserved, but in a few instances no other information can be gleaned; they probably removed to a distant state where they retired, or died, and their names do not appear in our most valuable American Medical Directory.

"The titles of the papers are often suggestive of the date of writing. Articles on 'Milk Sickness' will indicate the period of its prevalence. 'Camp diarrhoea' is a name associated with the Civil war. Some articles are pathetic in their associations. Prof. James T. Whittaker talked earnestly to us at Lafayette, in 1896, on 'Climatotherapy in Phthisis,' and in less than two years from that date, fell a victim himself to the disease. Dr. James S. Gregg sat in his chair while he read his paper on 'Locomotor Ataxia,' in 1889, in which he referred to his own case, and died one year later from the disease. The natural history of some affections can be studied, and it is interesting to note the views held by authors of papers, in regard to tuberculosis, sixty years ago, and compare the observations made in the study of this disease from time to time in three score years.

"I think it is proper at this place to call attention to the value of the obituary notices in these transactions. They are found in the volumes from 1879 to 1907, and usually have been prepared by persons who were well acquainted with the deceased, and so are fitting tributes to their memories. Each name can be found readily by referring to the index printed in connection with this booklet, under the heading "Obituary." Historical societies will, in the future, refer to these for information.

"There is a total of four hundred eighty-two names, and one thousand two hundred four articles and reports.

"As I have scanned these transactions, the faces of men long since dead come up before me, nay, I even seem to catch the very tone of their voices as they read or discussed various subjects. Surely I have been fortunate to have seen and heard so many of the medical men of Indiana—two generations—those who have passed away, and those who yet mingle with us. We should revere the memories of the dead, and honor the men of this period who are doing better work by reason of education and experience.

"A final word in closing. Possibly this is my last work of magnitude for the Indiana State Medical Association. I have given a number of spare moments of the last five months to this task. Much of that time I have been in the shadow of a hospital near a sick wife who for forty-nine years was my constant gentle comrade. After I saw her no more, I continued the work, in order, as an Oriental friend of mine once expressed himself to me when he went into a retreat for nervous troubles, 'That I might forget something.'"

In addition to the articles already enumerated in our letter of February 26, by the Council on Pharmacy and Chemistry of the A. M. A., the following have been accepted:

Abbott Laboratories:

Abbott's Mineral Oil Emulsion.  
Ephedrine Hydrochloride-Abbott.

Eli Lilly & Co.:

Ephedrine Sulphate-Lilly.  
Pulvules Ephedrine Sulphate-Lilly, 0.025 Gm.  
Pulvules Ephedrine Sulphate-Lilly, 0.05 Gm.  
Ampoules Ephedrine Sulphate-Lilly, 1 cc., 0.05 Gm.  
Solution Ephedrine Sulphate-Lilly, 3 per cent.

E. R. Squibb & Sons:

Scarlet Fever Streptococcus Toxin-Squibb, 1 cc.

Towt-Nolan Laboratory:

Lactobacillus Acidophilus Milk (Towt).

Nonproprietary Articles:

Ephedrine.

CORRESPONDENCE

MEDICAL RESERVE OFFICERS

A; circular of information pertaining to the organized reserve of the medical department of the Army and Navy has been sent us for publication. The circular is as follows:

To the Medical Profession Within the Fifth Corps Area:  
1. The War Department has directed that the Fifth Corps Area, consisting of the states of Ohio, Indiana, Kentucky and West Virginia, furnish 2,439 medical reserve officers as its quota in the national defense plan.

2. There are 120 units required to be organized and these consist of medical regiments; general, surgical, evacuation and station hospitals, hospital trains, surgical groups, and various zone of the interior installations.

3. There are now 1,079 physicians commissioned in the Reserve Corps in this Corps Area, leaving 1,360 vacancies to be filled.

4. Appointment in the Reserve Corps is made for a period of five years and any licensed physician is eligible for appointment.

5. Those having had World war service are entitled to a commission one grade higher than held during the war; others can only be commissioned as first lieutenants and must be between the ages of twenty-one and thirty-six years.

6. Reserve officers cannot be ordered to active duty without their consent except in time of a national emergency expressly declared by congress.

7. Application blanks for appointment and further information may be obtained from the surgeon, Fifth Corps Area, Columbus, Ohio.

8. If you are already an officer of the Medical Reserve Corps it is desired that you get in contact with physicians in your vicinity who are not in the Medical Reserve Corps, with a view of getting them to join.

9. If you are not a commissioned officer in the Medical Reserve Corps we want you to join if you come within the provisions as set forth in paragraph 5 of this circular.

10. We, as American citizens (this applies also to the nationals of any other country or state) are indebted to our government for the privileges we enjoy in the matter of freedom, liberty and protection which is guaranteed to us under our flag, the symbol of our government—a government conceived in liberty and dedicated to the proposition that all men are created equal. Our flag, since the adoption by our forefathers, has never been lowered to any foreign nation or potentate; a flag so conceived and so dedicated can never be supplanted by any other flag when the citizens over whom it floats and affords protection remain loyal and true. In the early days of our government it required all able-bodied citizens between the ages of eighteen and forty years to assemble once a year at a rendezvous for muster and military training to the end that all such could receive instructions in military matters in case their services were needed in an emergency. While this is no longer required by law it is believed that it would be a great national asset and the most effective method of preventing future wars, if all able-bodied citizens were required to devote two or three years of their lives to military training before entering upon their civilian duties. Military training never hurts anyone. It is an asset to the youths of our country. It teaches discipline, obedience, develops physique and makes them respect the laws of the land and their seniors and above all makes them true, loyal and law-abiding citizens of whom we have not too many nowadays. We of the medical profession are by nature of things the guardians of the health of our citizens in time of peace. In time of war we have a double function—professional and military. For the proper performance of the latter we must be trained and educated in our duties. The uniform does not make an officer. To properly perform your functions as an officer of the Medical Corps you must be trained. Above all we must be organized so that when the day comes each and all of us will know what is required of us, where we are to go and what is expected of us. We must be organized so that each and all of us can be utilized to the best of his ability and put in his proper place in accordance with his special training and qualifications—no more round pegs in square holes must occur as did in the World war. We will be the first branch of the service that must function immediately and efficiently on mobilization day. So my brothers in the profession, I call upon you to do your duty toward preparedness as you are now doing for your patients. The medical profession has never failed the public in the performance of duty in time of need. We have always manifested a spirit of desiring to correct mistakes when discovered. Let us now get busy and organize to the end that no mistakes made in the last war will be repeated in any future war. We all owe this much at least to our country and to our flag. The work of Washington was not



finished at Yorktown; the work of Lincoln was not completed at Appomattox. They live in our institutions, one in the Constitution which his efforts caused to be adopted, the other in the amendments which his sacrifice caused to be ratified. Your work was not all done on the sea or on the fields of France.

L. T. HESS,

Colonel Med Corps, U. S. Army,  
Corps Area Surgeon.

#### CITIZENS MILITARY TRAINING CAMPS

A general letter to the members of the medical profession concerning support and patronage of the citizens military training camps has been sent us with the request that the same be published. The letter is as follows:

HEADQUARTERS FIFTH CORPS AREA

Office of the Surgeon

Fort Haynes, Columbus, Ohio,

January 15, 1927.

Dear Doctor:

We, of the medical profession, are in a position to wield a powerful influence in our communities. No profession comes in closer contact with the people of their community than the medical profession. No profession is more willing to serve the people in their professional capacity nor more patriotic in the performance of their duty to their country and their flag. With this preamble may I point out to you how the medical profession can lend much assistance to our country in furthering the cause of preparedness?

1. In bringing to the attention of members of the community in which they practice the advantages of the citizens military training camps. Most people do not stop to realize what a wonderful public health opportunity is afforded by these camps with their adequate supervision, physical training and character building as a result of good food, regular hours, medical supervision, exercise, etc. If the practicing physician would bear these things in mind and persuade the parents to send their young boys to these camps, they could perform no more patriotic service.

2. Candidates attending these camps are required to be examined physically and be protected against smallpox and typhoid fever, which we all must admit is a wise provision and benefits not only the individual but the public in general. The government has no funds to recompense physicians for doing this work—although it provides the necessary vaccine—therefore the medical profession is being called upon to perform this patriotic work and to furnish each candidate with a vaccination certificate and a duplicate for these headquarters.

3. In order that we may be prepared for any emergency similar to that of the World war the medical profession is being organized so that we can do our patriotic duty in such an event. There is inclosed herewith a brief synopsis of our requirements for your patriotic consideration.

It is hoped that you will give these matters careful consideration and fill out the inclosed card and return to this office. No stamp is needed.

A prompt reply on inclosed postal will indicate to us that you are interested in the proposition of national defense and that you are willing to further its cause to the best of your ability. Do not throw this in the waste basket but keep it on your desk as a reminder of your patriotic duty to your country and to your flag.

Faternally yours,

L. T. HESS,

Colonel Med. Corps, U. S. Army,  
Corps Area Surgeon.

## SOCIETIES AND INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

March 28, 1927.

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D.; Jas. A. MacDonald, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held March 21, read and approved.

The release, Spring Fever, approved for publication on Monday, April 4.

Letter received from the permanent secretary of the Indiana High School Athletic Association. Secretary instructed to keep in touch with this organization in order to obtain any data they may have collected concerning the health of participants in the 1927 high school tournament.

Letter received from the secretary of the Marion County W. C. T. U. stating that this organization would be pleased to receive fifty copies of the weekly bulletin and see that they are distributed. Secretary instructed to send fifty bulletins each week to the secretary of this organization.

Letter received from the secretary of the department of education of the Illinois State Medical Society stating that they appreciate the bulletins.

Request received from speaker from Rush County Medical Society for Monday, April 4. Speaker obtained to fill date. Society desired paper upon a surgical subject which would be interesting and not too technical for the general practitioner.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole Monday, April 4.

WILLIAM N. WISHARD, M.D.,  
Chairman.

THOS. A. HENDRICKS,  
Secretary.

### BUREAU OF PUBLICITY

April 4, 1927.

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D., chairman; Murray N. Hadley, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting, held March 28, read and approved.

The following bills were approved for payment:

Bailey Office Supply	\$15.80
Central Press Clipping Service	5.00
W. K. Stewart Co.	2.20
Wm. P. Walker	8.50

Total \$31.50

The release "Spring Cleaning" read, corrected and approved for publication April 11.

The following requests were received for speakers:

Clinton County Medical Society, Frankfort, Ind., on Monday evening, April 7. Talk that will interest the general medical men.

Speaker for Greensburg Rotary Club, April 11. Talk on medical legislation.

The Bureau assigned speakers to fill both engagements.

Secretary made report on booklet published by the American Institute of Baking "Baking Science and Human Welfare."

Request received from Chairman of the Journal Committee of the Louisiana State Medical Society for information concerning our health educational releases to the newspapers.

Bulletin of Toledo Academy of Medicine reviewed showing work of Education and Publicity Committees of that organization.



There being no further business, the meeting was adjourned. The above minutes were approved in each separate part and as a whole Monday, April 11.

WILLIAM N. WISHARD, M.D.,  
Chairman.  
THOS. A. HENDRICKS,  
Secretary.

#### BUREAU OF PUBLICITY

April 18, 1927.

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D., chairman; Murray N. Hadley, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting, held April 4, read and approved.

The release upon Dental Health Week which endorsed the second annual observation of this week by the Indiana Dental Association, read and approved.

Request for speaker for health program at Technical high school received and speaker assigned. The exact date was to be given later.

Letter received from president of the American Institute of Baking, offering speakers. Consideration deferred.

Letter received from secretary of Ninth District Medical Society requesting a speaker for a public meeting May 13.

Bureau discussed the advisability of having a public meeting at the time of the annual state meeting. It was decided that the Bureau recommend that such a meeting be held.

There being no further business, the meeting was adjourned. The above minutes were approved in each separate part and as a whole, Monday, April 25.

WM. N. WISHARD, M.D.,  
Chairman.  
THOS. A. HENDRICKS,  
Secretary.

### TRUTH ABOUT MEDICINES

#### NEW AND NONOFFICIAL REMEDIES

**CONCENTRATED POLLEN EXTRACTS—SWAN-MYERS**—In addition to the products listed in New and Nonofficial Remedies, 1926, p. 28, the following have been accepted: Cosmos Concentrated Pollen Extract—Swan-Myers; Dandelion Concentrated Pollen Extract—Swan-Myers; Palmer's Amaranth Concentrated Pollen Extract—Swan-Myers. Swan-Myers Co., Indianapolis. (Jour. A. M. A., March 5, 1927, p. 788.)

**EPHEDRINE**—Ephedrine is an alkaloid first obtained by Nagai in 1887 from *ma huang* (*Ephedra equisetina*). Chemically, ephedrine is a-hydroxy-b-methylamino-propylbenzene. Structurally, it is closely related to epinephrine. Its salts are, in general, soluble in water and in alcohol, and the solutions are stable. Ephedrine produces effects similar to those produced by epinephrine. It also has been found to exert a direct depressant action on smooth and cardiac muscle. It produces a rather lasting rise of blood pressure, on intravenous or intramuscular injection, due mainly to vasoconstriction. Thus far, the most definite indications for the usefulness of ephedrine are for its local use on the turbinates and for ophthalmic examinations. Ephedrine has proved effective in some cases of asthma.

**EPHEDRINE HYDROCHLORIDE**—The hydrochloride of an alkaloid obtained from *Ephedra equisetina*. For a discussion of its actions and uses, see preceding abstract "Ephedrine."

**EPHEDRINE HYDROCHLORIDE—ABBOTT**—A brand of ephedrine hydrochloride—N. N. R. Abbott Laboratories, North Chicago, Ill.

**EPHEDRINE SULPHATE**—The sulphate of an alkaloid obtained from *Ephedra equisetina*. For a discussion of its actions and uses, see preceding abstract "Ephedrine."

**EPHEDRINE SULPHATE—LILLY**—A brand of ephedrine sulphate—N. N. R. Ephedrine Sulphate—Lilly is also marketed in the form of Pulvules Ephedrine Sulphate—Lilly, 0.025 Gm.; Pulvules Ephedrine Sulphate—Lilly, 0.05 Gm.; Ampoules Ephedrine Sulphate—Lilly, 1 cc., 0.05 Gm.; and Solution Ephedrine Sulphate—Lilly, 3 per cent. Eli Lilly & Company, Indianapolis. (Journal A. M. A., March 19, 1927, p. 925.)

**LACTOBACILLUS ACIDOPHILUS MILK (TOWT)**—A milk culture of *B. acidophilus* which contains not less than 250 millions of viable organisms (*B. acidophilus*) per cc. at the time of sale. For a discussion of the actions and uses of bacillus acidophilus preparations, see New and Nonofficial Remedies, 1926, p. 211, "Lactic Acid-Producing Organisms and Preparations." Towt-Nolan Laboratory, Oakland, Calif.

**SCARLET FEVER STREPTOCOCCUS TOXIN—SQUIBB** (New and Nonofficial Remedies, 1926, p. 368).—This product is also marketed in packages of three 1 cc. vials, each containing 30,000 skin test doses. E. R. Squibb & Sons, New York.

**Glaseptic Ampoules Sodium Cacodylate—P. D. & Co.**, 0.05 Gm., 1 cc.; Glaseptic Ampoules Sodium Cacodylate—P. D. & Co., 0.1 Gm., 1 cc.; Glaseptic Ampoules Sodium Cacodylate—P. D. & Co., 0.13 Gm., 1 cc.; Glaseptic Ampoules Sodium Cacodylate—P. D. & Co., 0.2 Gm., 1 cc.; Glaseptic Ampoules Sodium Cacodylate—P. D. & Co., 0.3 Gm., 1 cc.; Glaseptic Ampoules Sodium Cacodylate—P. D. & Co., 0.45 Gm., 1 cc.; Glaseptic Ampoules Sodium Cacodylate—P. D. & Co., 1 Gm., 2 cc.; Glaseptic Ampoules Sodium Cacodylate—P. D. & Co., (for Intravenous Use), 0.2 Gm., 5 cc.; Glaseptic Ampoules Sodium Cacodylate—P. D. & Co., (for Intravenous Use), 0.45 Gm., 5 cc.; Glaseptic Ampoules Sodium Cacodylate—P. D. & Co., (for Intravenous Use), 1 Gm., 10 cc. For a discussion of the actions and uses of sodium cacodylate, see Useful Drugs, Seventh Edition, p. 133. Parke, Davis & Company, Detroit. (Jour. A. M. A., March 26, 1927, page 1003.)

#### PROPAGANDA FOR REFORM

**MORE MISBRANDED NOSTRUMS**—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: Ambrozoin Tablets (The American Apothecaries Co.), containing ammonium chloride, licorice extract, a calcium compound, traces of terpin hydrate and an iodide. Flam (Flam Co.), a flavored syrup containing ammonium chloride and bromide, with small amounts of sodium benzoate and glycerine. Lemke's Blood Drops and Laxative Herb Tea (Dr. H. C. Lemke Medicine Co.), the first consisting of extracts of plant drugs, including aloe, together, with sugar, alcohol and water; the second consisting of a mixture of powdered senna, with small portions of althea, fennel, buckthorn, elder, coriander, sassafras, flaxseed, lavender, American saffron, licorice, bear-berry, mullein, yarrow, boneset and peppermint. Bronchini (Wm. M. Chapplear and Sons Co.) consisting of ammonium chloride, extracts of plant drugs, flavoring material, including oils of anise, sassafras, sugar, alcohol and water. Arium Tablets (The Associated Radium Chemists, Inc.), composed mainly of lithium carbonate, starch and talc, with 8.58 milligrams of radium to each tablet. Moorite Mineral powder (The Moorite Products Co.), consisting of powdered clay. (Jour. A. M. A., March 5, 1927, p. 744.)

**CARDIAZOL**—From German publications it appears that Cardiazol is claimed to be "Pentamethlentetrazol" and is one of a number of products which have been recently put out that are claimed to produce the therapeutic effects of camphor. Cardiazol is a product of Knoll Aktiengesellschaft, Chemische Fabriken, Ludwigshafen a. Rh., Germany, marketed in the United States by E. Bilhuber, Inc., New York. Cardiazol has not been accepted for New and Nonofficial Remedies. (Jour. A. M. A., March 5, 1927, p. 747.)



**NITROSCLERAN.**—Basler states that according to the manufacturer "Nitroscleran" has the following composition: Sodium chloride, 6.0; sodium nitrite, 20.0; or 40.0; sodium phosphate, 3.6; potassium phosphate, 2.0; water to make 1,000.0. The A. M. A. Chemical Laboratory reports that its tests were confirmatory of the statement of Basler that the preparation is nothing more than a solution of the well-known sodium nitrite dissolved in water to which some salts have been added. (Jour. A. M. A., March 5, 1927, p. 747.)

**BORIC ACID AND A HOSPITAL ACCIDENT.**—In a hospital, through a confusion of technic among three nurses, infants in the nursery were apparently given boric acid solution instead of drinking water and six died. Such accidents will no doubt be prevented in the future by rulings relative to the manner of preparing water for drinking purposes and as to the bottling and labeling of all solutions of medicinal value. Compared with phenol, cresol or mercury preparations, boric acid is relatively nonpoisonous, but cases are recorded of deaths, even of adults, when considerable quantities of saturated boric acid solutions have been introduced into the body. In reported cases, from 1 to 3 Gm., have produced serious symptoms, and from 15 to 30 Gm. have been fatal to adults. In the recent accident, each baby must have received from 15 to 60 cc. of a saturated solution of boric acid. (Jour. A. M. A., March 12, 1927, p. 841.)

**ASTHMOLYSIN.**—According to the advertising, Asthmolysin is "a combination of the suprarenal and pituitary hormones in distinct proportions" which is prepared by a "special method." The use of pituitary in bronchial asthma is contraindicated. While epinephrine is used with advantage in some forms of asthma, there does not appear to be any reason why physicians should use a secret preparation containing an undetermined amount of it, when accuracy of dosage and therapeutic effectiveness may be obtained by the use of pharmacopeial product. (Jour. A. M. A., March 12, 1927, page 858.)

**EPHEDRINE.**—The Council on Pharmacy and Chemistry reports that the A. M. A. Chemical Laboratory has found the ephedrine sulphate received from Eli Lilly & Company to be of acceptable quality. The advertising claims for Ephedrine Sulphate-Lilly have been revised in accordance with the recommendations of the Council, and therefore the Council accepts Ephedrine Sulphate for description in New and Nonofficial Remedies and lists Ephedrine Sulphate-Lilly as a brand which complies with the New and Nonofficial Remedies' standards. (Jour. A. M. A., March 19, 1927, page 924.)

**THE LYE BILL.**—Congress passed the Federal Caustic Poison Bill, March 2, and the President signed it on the following day. This requires that household packages of lye, ammonia, carbolic acid, oxalic acid, and other caustic substances named in the law be distinctly labeled "Poison," with instructions as to emergency treatment in case of accident. (Jour. A. M. A., March 19, 1927, page 926.)

**BENZYL BENZOATE-L. A. Van Dyk,** omitted from N. N. R.—The Council on Pharmacy and Chemistry reports that L. A. Van Dyk manufactures "Benzyl Benzoate-L. A. Van Dyk," and two preparations of the drug, "Benzyl Benzoate-L. A. Van Dyk, 20 per cent," and "Benzyl Benzoate, 20 per cent, Aromatic." The Council omitted these preparations from New and Nonofficial Remedies because the advertising for these products is based on the enthusiastic reports published when benzyl esters were first used experimentally in medicine and the manufacturer did not make the revisions which were required to permit their continued recognition. (Jour. A. M. A., March 19, 1927, page 944.)

**BISMOGENOL NOT ACCEPTABLE FOR N. N. R.**—The Council on Pharmacy and Chemistry reports that Bismogenol is the nondescriptive name applied to a suspension of the well-known basic bismuth salicylate in olive oil by E. Tosse & Company, Hamburg, Germany (E. Tosse & Company, Inc., New York, distributor). E. Tosse & Company are not the discoverers of bismuth

salicylate, nor did they discover the therapeutic properties of this drug. For this reason the Council could not recognize the name "Bismogenol," and therefore found the product which is marketed under this name unacceptable for New and Nonofficial Remedies. (Jour. A. M. A., March 19, 1927, page 944.)

**RECENT OBSERVATIONS ON SCARLET FEVER.**—The new method of treating scarlet fever patients by the administration of a suitable antitoxin has presented a problem in relation to the development of protection against the disease. A study in the New Haven Hospital of late immunity developed by former patients who were treated with scarlet fever antitoxin and those who did not receive antitoxin indicates that there may be some disadvantage in the therapeutic dosage with the antitoxin in respect to the establishment of a more lasting immunity. It may turn out that the combating of the actual disease decreases the security that an attack of scarlet fever almost invariably promoted in former days. Nicholls at Yale has demonstrated the presence of *Streptococcus scarlatinae* in a proportion of persons who exhibited features of infection with hemolytic streptococci without evidences of clinical scarlet fever, thus showing that an existing immunity to the soluble toxin of *Streptococcus scarlatinae* does not prevent the development of local pyogenic infections with this organism. Persons so infected may serve as foci for the spread of scarlet fever. Trask, of Yale, urges that a large excess of antitoxin be used for therapeutic purposes to obtain consistently satisfactory results. In late cases with faded rash, little or no benefit may be expected from antitoxin therapy. Septic complications may continue when the specific toxemia and its attendant rash have terminated, thus suggesting that *Streptococcus scarlatinae* may have two different modes of attack and thus result in different clinical pictures of the disease. (Jour. A. M. A., March 26, 1927, page 1004.)

**TUBERCO.**—This is described by its exploiters as "the only guaranteed treatment for all forms of lung trouble." It is sold by the Tuberclo Laboratories, Atlanta, Georgia. According to the quacks that sell Tuberclo, "the chemist has long known that locked within the bosom of the pine is the cure of many diseases, among them tuberculosis." Of course, neither the chemist nor any one else has known any such thing, but one cannot expect truthfulness from those who hold human life so lightly as to gamble with it. Further, according to the thesis developed by the Tuberclo concern, the scientific world made a fruitless search for its alleged illusive property, until the Tuberclo Laboratories succeeded in incorporating in convenient form all the valuable resinous principles of the pine "deemed so vital in the destruction of the Tubercle Bacilli and the arrest of the disease itself." The A. M. A. Chemical Laboratory examined Tuberclo and reports that the product appears to be essentially gum turpentine, coated with powdered cinnamon and placed in capsules. (Jour. A. M. A., March 26, 1927, page 1022.)

## ABSTRACTS

### ABDOMINAL MANIFESTATIONS OF HODGKIN'S DISEASE

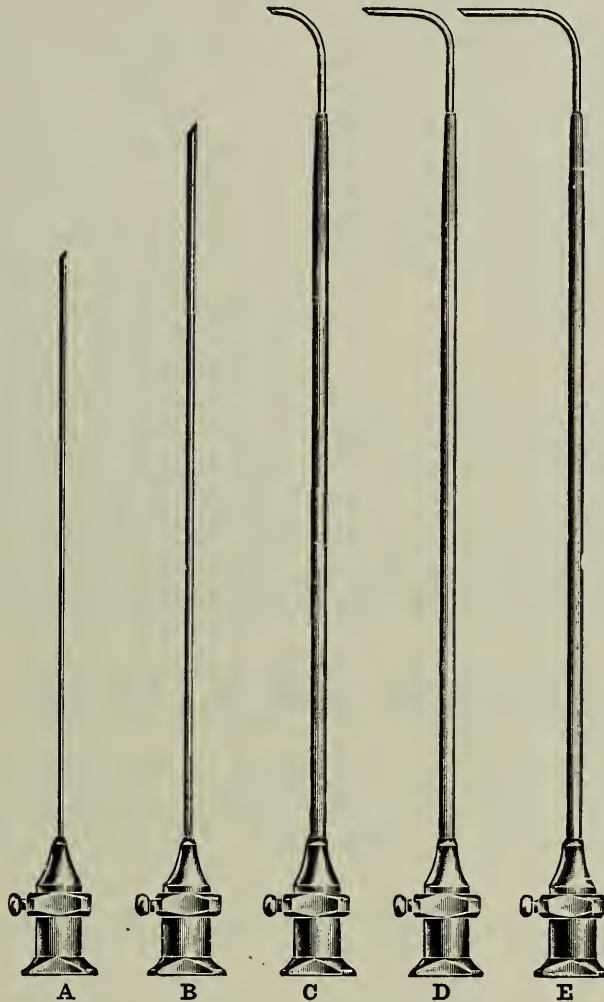
In Hodgkin's disease, primary involvement of the abdominal viscera is exceedingly rare. George P. Muller and Russell S. Boles, Philadelphia (*Journal A. M. A.*, January 29, 1927), reports three such cases. Little is to be gained from a consideration of the symptoms in the abdominal type of Hodgkin's disease, since they are variable and may simulate a number of acute and chronic conditions. Symptoms referable to the gastro-intestinal tract are usually present when the abdominal viscera are affected. Pruritus, diarrhea and the recurrent type of fever are always suggestive; jaundice, ascites and

(Continued on Adv. Page xx)

*Write for Reprint on*

**Intranasal Injection of Alcohol in the Treatment of  
Hypersthetic Rhinitis and Some of the  
Nasal Neuroses**

By Otto J. Stein, M.D.



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## ABSTRACTS

(Continued from Page 206)

adenopathy may be present. When Hodgkin's disease is suspected, biopsy of an affected gland should be performed. The classic histologic picture of the disease is rarely wanting when the disease exists. In atypical forms, confirmatory evidence is usually supplied by frequent blood examinations; the blood picture is fairly characteristic. Hodgkin's disease of the abdominal type must be differentiated from tuberculous peritonitis, at times from typhoid, from lymphosarcoma of the retroperitoneal glands, from the splenomegalies—particularly leukemia and splenic anemia—and occasionally from splenomegaly of the Gaucher type, Banti's disease and von Jaksch's anemia. Radical surgery may be considered when the external evidence indicates that the process is chronic and nonprogressive, when some function is interfered with by pressure, and when splenomegaly persists after irradiation. In the treatment of Hodgkin's disease, the best results in the way of "temporary amelioration" have been obtained by roentgenotherapy, both general and local. Such therapy should be directed primarily to the abdominal deposits. The prognosis of Hodgkin's disease is apparently hopeless.

## BOOK REVIEWS

**HISTORY OF THE MAYO CLINIC.** Sketch of the History of the Mayo Clinic and the Mayo Foundation. Octavo Volume of 185 Pages, Illustrated. Philadelphia and London: W. B. Saunders Company, 1926. Cloth, \$3.50 Net.

This little book records in chronologic order the principal facts concerning the history of the Mayo Clinic

and the Mayo Foundation. It is a very valuable contribution to the history of American medicine and will be read with interest by all the members of our profession.

**HUMAN PATHOLOGY.** By Howard T. Karsner, M.D., Professor of Pathology, School of Medicine, Western Reserve University, Cleveland, Ohio. Philadelphia and London: J. B. Lippincott Company. Price \$10.00.

"The purpose of this book is to present the morphological alternations incident to disease, in the light of modern views as to their functional significance." The author has successfully achieved his purpose. His text is clear and he has adequately covered his field. Many of the illustrations were made under the direction of Dr. Simon Flexner for a book on pathology which he proposed to write. Dr. Flexner contributes an introduction to the book and remarks that "Dr. Karsner has made a notable addition to the literature on pathology." At the end of each chapter there is found a satisfactory bibliography. The author at no time departs very far from the teachings of standard text-books. He defines gangrene as necrosis to which is superadded bacterial invasion. He does not attempt any very definite definition of inflammation. He rather closely follows Borst in his classifications of tumors; he deals with this difficult topic of tumors in a very instructive fashion, he provisionally includes the melanomas with the sarcomas. His differentiation between myxomas and myxo-sarcomas is not at all clear and he fails to mention that practically all true myxomas are malignant. The author is very fair in all his statements, for instance, in discussing angina pectoris, he writes: "In our experience all the cases have shown coronary sclerosis, but many cases are reported without lesion in the coronaries." Of course, as in all first editions, there are a few omissions.

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## ORIGINAL ARTICLES

### RUPTURE OF SOLID ABDOMINAL VISCERA\*

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INDIANAPOLIS

Present-day traffic congestion causes an increasing number of automobile accidents. Hospitals are daily receiving patients who are thrown violently to the ground after being struck by an automobile, and who, in some instances, have had the wheels pass over their bodies. These patients suffer various lacerations, contusions and fractures, and also very frequently are afflicted with what the newspapers are pleased to call "shock," or more often "internal injuries." These "internal injuries" a generation ago were regarded as being of a rather indefinite nature. The patient either died soon or became better in a few hours. The exact nature of his abdominal injuries was not fully recognized. The enormous increase in the amount of abdominal surgery being done has, however, shown that these injuries are far from being indefinite in character, but on the contrary are very faithful in following a rather set course of events when sustained. A fairly common occurrence following abdominal trauma is the rupture of a solid abdominal viscus, usually the liver.

A severe blow or injury delivered to the abdomen by being thrown to the ground following impact with a vehicle, a wheel passing over the abdomen after such a fall, a fall from a height—any of these may be followed by an injury to an abdominal viscus. The hollow organs are rarely injured, as they are in general quite movable within the abdomen. They are plastic to pressure, except when the organ is filled to capacity as in the case of a full urinary bladder, when a blow may be followed by rupture of the organ. This is an illustration of the well known law of physics, that a force is transmitted equally in all directions in a fluid medium. There are present, however, in the abdominal cavity three organs that are held in position more or less

firmly, that are of solid consistency, and that offer the physical situation for rupture following trauma. These are the liver, spleen and the kidneys, the latter being considered in this regard as abdominal organs. The pregnant uterus may be considered in the same category, since with the foetus filling its cavity to capacity it offers the same physical situation as the liver, spleen or kidneys.

The literature contains a number of reports of rupture of the liver or spleen following very slight trauma indeed, as discussed by Kakels<sup>15</sup>. The liver has been ruptured merely by the patient stumbling, and in one case simply through the patient bouncing his little child on the abdomen in the evening romp. The malarial spleen has been ruptured by rough palpation of the abdomen by physicians. These instances of course are rare. The outstanding important feature of the diagnosis is the history of fall or severe abdominal trauma. This is ordinarily followed by signs of shock, a rapid, thready pulse, subnormal temperature, and a cold, clammy skin. Due to the hemorrhage, the blood shows a progressive fall in the red count and the hemoglobin. Dullness appears in the liver or spleen region. There may be pain in the right shoulder with liver injury, in the left if spleen, and in the back if kidney. The abdomen to palpation feels rather "doughy." There is usually no vomiting. Prompt surgery to stop hemorrhage is imperative. The following cases are illustrative of conditions met with in this type of abdominal injury.

*Case 1.* A young man fell from a height of thirty feet, striking on his right side on a cement sidewalk. He sustained external injuries but no attention was called to his abdomen until the next day when he began to have abdominal pain and show signs of internal hemorrhage. He had developed some anemia and a doughy tender abdomen. There was no vomiting. His abdomen was opened at the Putnam County Hospital under a diagnosis of rupture of the liver. The cause of an abdomen full of blood was found in a rent in the superior surface of the liver which was bleeding briskly. This was packed with gauze with the free end coming out of the wound

\*Read in part before the Wayne-Union County Medical Society at Richmond, Indiana, November 18, 1926.



and the abdomen closed. Under supportive treatment he rapidly improved and went home well in three weeks.

*Case 2.* A boy nine years old was thrown from his bicycle to the street by an automobile, the front wheel of which passed over the upper abdomen. Aside from being badly bruised and somewhat dazed, nothing serious developed in his condition for forty-eight hours. He then rather suddenly went into a state of shock, exhibiting a rapid thready pulse, pallor, and a slightly distended, doughy tender abdomen. Operation at the Methodist hospital under a diagnosis of ruptured liver disclosed a tear three inches long in the posterior surface of the liver to the right of the gall bladder. The hemorrhage was stopped by a gauze pack as in Case 1, and he went home well on the twenty-third day.

*Case 3.* A young man was caught beneath a falling wall in the process of tearing down a dwelling. As in the two preceding cases he revealed nothing that would indicate intra-abdominal injury for twenty-four hours. He then suddenly went into collapse with almost the identical symptoms and signs of Case 2. The abdomen was opened at the Putnam County Hospital under the diagnosis of ruptured liver and two tears found, one at the reflection of the peritoneum from the liver on to the diaphragm at the superior surface, and the other laterally in the right lobe. These were packed with gauze and the hemorrhage stopped. Despite vigorous post-operative treatment, he died the following day.

*Case 4.* A young negro was struck in the flank during a fight. He went into shock, showing the characteristic pulse and subnormal temperature, pain in the left shoulder and dullness over the left upper quadrant of the abdomen. His abdomen was opened at the City hospital without an accurate preoperative diagnosis being made other than one of intra-abdominal injury that was probably causing hemorrhage. The spleen was found to be lacerated in a stellate pattern and much free blood was present in the abdominal cavity. A splenectomy was done. After several days of stormy convalescence he died. An autopsy showed pneumonia of both lungs but no abnormality of conditions in the abdomen. There was no further bleeding in the abdomen following operation.

*Case 5.* A negro was struck in the right flank with a baseball bat. He exhibited immediate collapse, with the usual symptoms and signs of shock, together with abdominal pain and some distention. There was blood in his urine. The abdomen was opened and found full of blood. The right kidney was torn nearly in two and the posterior peritoneum had been torn, allowing the blood to collect in the abdominal cavity. A right nephrectomy was followed by recovery.

*Case 6.* A young woman, about four months

pregnant, fell in her bathroom, striking the lower abdomen against the sharp edge of the porcelain wash basin. She went into profound collapse immediately and was taken to the Methodist hospital in serious condition. A laparotomy revealed the uterus split open along its anterior aspect, with the placenta in the depths of the wound. There was free blood in the abdominal cavity. The uterus was sutured and the abdomen closed. Contrary to expectations she did not miscarry and gave birth to a full term baby later.

The above cases were rather easy to diagnose, since they all showed signs of a severe abdominal injury. The diagnosis is not always so easily made. A small hemorrhage may show nothing more than signs of slight peritoneal irritation. If the hemorrhage stops the symptoms stop. As pointed out by Butler and Carlson<sup>3</sup>, even a severe hemorrhage may stop and then start again, giving a confused picture of recurring illness in the patient that would be almost impossible to diagnose accurately. Many slight tears in the liver and spleen get well under rest in bed and general treatment without the true situation of affairs being recognized. This is also true of large tears that sometimes stop bleeding, as shown by the observations of Nussbaum, who, in a large series of autopsies at the Allgemeine Krankenhaus in Vienna found several livers exhibiting linear or stellate tears of considerable extent that had stopped bleeding and healed without their true nature being recognized or operation performed. There are instances in the literature of the condition not being recognized at the time of its occurrence, but due to persistent illness laparotomy has revealed the liver or spleen torn with hemorrhage present. Meade<sup>21</sup> reports one such case with active hemorrhage at laparotomy two months after the accident that caused the liver injury. Wallace<sup>35</sup> operated a case two years after the injury that showed a ruptured spleen. This patient was bedridden four weeks, and was discharged "weak," only to have persistent pain in the right shoulder and upper right abdominal quadrant; a diagnosis of rupture of the liver was made, with cessation of hemorrhage. At operation the ruptured organ was the spleen; the patient had a complete transposition of organs in the abdominal cavity.

In making the diagnosis of rupture or tear of a solid abdominal viscus all writers have emphasized the history of a fall or a severe abdominal blow being the most important single item. This is followed by physiological shock with the characteristic subnormal temperature, high thready pulse and cold clammy skin. Pain in the right shoulder if the injury is of the liver and in the left if the spleen, has been observed rather constantly by most writers. This pain will continue as long as active bleeding goes on, as well as the usual abdominal pain in the region of the injury

(Butler and Carlson).<sup>3</sup> This pain in the left shoulder is considered by Willis<sup>38</sup> to be a constant and extremely important sign in rupture of the spleen. There is frequently pain on breathing and grunting respiration in injury to the liver as the usual location of liver tears is on the superior surface where movements of the diaphragm cause discomfort.

Physical examination reveals a normal or sub-normal temperature. Should the capsule of the liver or spleen not be torn, however, and the hemorrhage take place beneath it, an abscess may form in a few days which will give the characteristic extreme rise and fall of temperature seen in liver abscess. (Rose and Carless<sup>29</sup>). This may also be accompanied by jaundice. The abdomen may be distended to some degree. It is "doughy" upon palpation with but little rigidity. As pointed out by White<sup>37</sup> a rigid abdomen with vomiting indicates a perforation of a hollow viscus, and not injury to a solid organ. Eliason<sup>12</sup> calls attention to a fine crepitant sensation upon palpation of the abdomen in these cases which he has observed in five instances. He compares it to the sensation one gets palpating a subcutaneous clotted hematoma after the clots have been broken up from continued examinations. Dullness develops rather rapidly in the region of the injured organ due to the collecting blood. This dullness is not so marked in the case of liver injury as compared with that of the spleen due to the gas in the caecum interfering with accurate percussion. (de Quervain.)<sup>9</sup> All writers warn against waiting for dullness in the flanks before making a diagnosis. Henderson<sup>14</sup> in reporting ten cases at the Boston City Hospital finds pre-operative diagnosis not an easy thing, and decries the practice of postponing operation too long until the patient has had bad effects from toxic absorption of the blood in the abdomen. In rupture of the liver there may be considerable extravasation of bile due to injury of the larger bile ducts or oozing from the torn surface of the liver itself. Cases are on record in which there has been no hemorrhage following a tear in the liver but only the outpouring of bile into the abdominal cavity. This seems to do very little harm as the bile is usually sterile. Warbasse<sup>36</sup> has noticed that these cases almost always show some degree of bradycardia. De Quervain<sup>9</sup> states that in cases showing only bile in the abdomen the dullness develops much more slowly than in hemorrhage and may not even be present at all, since the bile often collects in the lesser peritoneal cavity posterior to the stomach. These patients are usually jaundiced due to the absorption of bile from the abdominal cavity. If the stools are of normal color de Quervain feels safe in assuming the larger bile ducts are not injured. The blood picture in these cases is usually very typical, as anemia develops with a steady decrease in the hemoglobin and red

cell count as the bleeding goes on. This is of diagnostic importance, especially in those cases where the signs and symptoms are not typical or where the bleeding is not so severe as to call for emergency measures. There is usually some leukocytosis present to a slight degree, this being a point on which writers disagree. Butler and Carlson<sup>3</sup> state that a high white count is the rule. Several other writers claim there is little if any rise above 10,000 cells. White<sup>37</sup> feels the normal or near normal white count is of great importance in differentiating between the rupture of a solid viscus and the perforation of a hollow one where the leukocytosis is usually very high. As a final almost infallible point in diagnosing an individual in shock following an accident where the question is one involving the presence of hemorrhage in the abdominal cavity, aspiration should be used. This will prove the presence or absence of free blood and settle the question of whether immediate operation is indicated or not.

A word may be said here regarding the traumatic rupture of a diseased organ as compared with a normal one. The normal-sized liver seems to be as liable to traumatic rupture as the enlarged one, but in the case of the spleen this is not true. The literature is full of warnings regarding injury to an enlarged spleen. As stated above a spleen enlarged from malaria or some other condition has been ruptured from simple abdominal palpation. Berger<sup>2</sup> found in a series of 123 ruptured spleens that 99 were malarial. Wohl<sup>40</sup> sounds a warning against rough palpation of the spleen in any acute illness. Massari<sup>19</sup> states that malaria is so common since the World War and that enlarged spleens are consequently so frequently encountered that any abdominal injury may rupture the organ. It should be noted, however, that Conner and Downes<sup>4</sup> in eight years' experience in the Colon hospital during which time 30,000 cases of malaria were admitted, saw only three traumatically ruptured spleens. Mention should also be made of the spontaneous rupture of the spleen, in which the patient, without any trauma, or even exertion, develops sudden pain in the upper left quadrant of the abdomen with subsequent signs of internal hemorrhage and upon operation is found to have a lacerated, torn spleen. Several writers have reported such cases where histological examination of the removed organ has shown nothing pathological present. Metcalfe and Fletcher<sup>23</sup> report two such spontaneous ruptures in normal spleens, and Shorten<sup>31</sup> one. There are also several reports of spontaneous rupture of the diseased spleen, probably due, in the opinion of Hansell<sup>13</sup> to occluded veins in the organs or the presence of a degenerative process making them more friable than usual. Henderson<sup>14</sup> reports such a case where spontaneous rupture of a typhoid spleen occurred.



Once the diagnosis of rupture of a solid abdominal viscus is made operation is indicated without delay. The first report of operation for repair of injury to solid abdominal viscera was made by Willette in 1888. The prognosis at best is rather disheartening. Da Costa<sup>8</sup> states that 80 per cent die if not operated upon. Pfeiffer and Smyth<sup>26</sup> collected 135 cases of traumatic rupture of the spleen from the literature with a mortality of 77.8 per cent. Skevington<sup>32</sup> quotes the late Surgeon-General Coull-Mackenzie to the effect that 68.9 per cent of all splenic ruptures die within the first half hour. Eisendrath<sup>11</sup> showed a mortality of 40.5 per cent in his collection of 37 cases of suture of the liver following rupture. Wilms<sup>33</sup> showed only three recoveries in nineteen cases. Some patients die within a few minutes after injury from shock and exsanguination. Others go into extreme shock and cannot withstand operation, even with preliminary blood transfusion. Successful operation may be followed by a host of complications that lead to a disastrous end, prominent among which may be mentioned pneumonia, peritonitis and embolism.

A brief discussion of operative measures is not out of place at this point. These patients certainly should have, preliminary to operation, either intravenous salt solution, or better, a blood transfusion. They have lost blood internally, and in the majority of cases in considerable amount. They are in varying degrees of shock. The whole prognosis may be changed through the observation of this one measure. In case of either the liver or spleen rapid accurate work necessitates good exposure. This may be obtained by a high right rectus incision or a right rectus combined with a Bevan or sub-costal type; the latter, in my personal use being found the most satisfactory. I have never seen a subcostal incision of the oblique type followed by post-operative hernia, while the added exposure in these difficult situations more than makes up for the little risk run toward such a complication. After entering the abdominal cavity the tear in the spleen is instantly recognized by palpation. In the case of the liver the left lobe most often bears the brunt of the injury in the opinion of Rose and Carless.<sup>29</sup> However, Da Costa,<sup>8</sup> together with most of the writers in the literature on the subject, feels that it is the right lobe, and the superior surface of that lobe which is most frequently torn. In suspecting liver injury therefore, the hand is run back over its superior surface where the tear is usually recognized by the sense of touch. If no injury is found there, examination of the rest of the organ in a careful and systematic way is done, care being exercised that a second tear is not overlooked upon finding one injury.

When the injury or injuries are found three methods of attacking the problem are offered.

First, removal of the organ, applicable of course only in the case of the spleen or the kidney; second, suture of the lacerations, or third, packing of the tears with gauze to stop the hemorrhage. Ligation of vessels, repair of lacerations of major bile ducts, etc., may further complicate the problem. In the presence of laceration or tear in the spleen the usual practice seems to be splenectomy or nephrectomy in the case of the kidney. The difficulty of getting sutures to hold in the spleen or kidney substance and the problem of poor exposure are responsible for this. Pfeiffer and Smyth<sup>26</sup> report four cases of splenectomy in which the rupture occurred in "normal" spleens as compared with those in which there was enlargement due to malaria. This gave them the opportunity to study the blood of patients deprived of the normal spleen, and they discuss the definite and persistent anemia, the decreased vigor and resistance and the hyperplasia of lymphatic tissue over the body following removal of the normal spleen for rupture. They conclude, however, that these effects are not of sufficient importance to contra-indicate removal of the spleen when that procedure appears advisable. Observation of the patient after removal of the spleen under these circumstances has done much toward determining what is known of the function of the organ. A rather ingenious method of treating the ruptured spleen rather than removing it has been developed, I believe, by Dr. T. B. Noble.<sup>25</sup> A gauze sling sewed together with plain absorbable catgut is placed tightly enough around the organ to stop hemorrhage and cause coaptation of the lacerated edges, and the gauze brought out through the wound in the abdominal wall. The catgut absorbs after a few days permitting the removal of the sling and the spleen is healed.

The second plan of treating these injuries of the liver, spleen and kidneys, namely, by suture of the lacerations, is one fraught with difficulties. The mere number of plans one finds in the literature relative to the kinds of sutures and the method of their application or introduction is sufficient evidence to show that most of them are worthless. Suturing the liver may be compared with suturing two pieces of butter together. There can be no tension put on the sutures to approximate the edges, since they will pull out, and there is often ungovernable hemorrhage from the suturing. To prevent pulling out of the sutures there have been all manner of devices tried. White<sup>37</sup> uses stanchion sutures, sewing parallel with the laceration and then at right angles to it. Beer<sup>1</sup> ties his sutures over pieces of fat to prevent their cutting in. Morris<sup>24</sup> uses decalcified buttons of bone and threads his suture material through them. Payr uses plates of magnesium that are perforated (Warbasse).<sup>36</sup> Many writers have suggested any number of mattress, figure-eight and other sutures. The usual position of

tear makes suture impossible, and the added difficulties of making the sutures hold and the hemorrhage that is often caused makes the treatment of wounds of the liver or spleen by suture a method of doubtful value. When easy of access, approximation of the wound by suture may be tried.

The quickest, surest and most efficacious method of treatment is by packing with gauze. If necessary it can be done by sense of touch only, no exposure is necessary. It stops the bleeding and its use occupies only a moment or two. The gauze should be carried to the depths of the laceration and firmly packed in place, the free end coming out of the abdominal wound, from which it can be removed in a few days. There are no cases on record in which hemorrhage has started up again after removal of the gauze. Its removal in my own observation has not been attended with undue pain. If necessary in a young patient a short period of nitrous-oxide and oxygen anesthesia may be given during its removal. Da Costa<sup>8</sup> suggests that when packing the wound in a liver, the organ should be sutured to the abdominal wall to exert a firm material to pack against. This has not proven necessary in my observation, nor is it done by most of the writers on the subject. Packs may be introduced when the laceration is in a suitable situation in such a way as to tend to push the edges of the laceration together.

Much has been written on the advisability of so-called "autotransfusion" in these cases. Thies<sup>34</sup> was the first, in 1914, to make use of blood collected in the abdominal cavity by re-introducing it into the circulation of the individual, and White<sup>37</sup> the first in American literature to advocate its use in connection with the type of case under discussion. Thies, in his report of the first three cases in which autotransfusion was employed, selected three ruptured ectopic pregnancies in which the abdomen contained considerable blood. This was bled out carefully, mixed with salt solution and reintroduced into a vein. White has used this procedure when operating for rupture of the liver and advocates it highly. His technique has been to use an aspirator to obtain the blood from the abdominal cavity. The blood is then strained and the clots washed out and reintroduction into the circulation carried out. Only fresh, pure blood should be used. If the patient has lost a great deal of blood, and there is no bile free in the abdominal cavity this procedure should certainly be of great benefit. If carried out in conjunction with preoperative transfusion of whole blood the mortality of this type of case should show a decided drop. Sweet, quoted by Conners<sup>5</sup> found that in the thoracic duct of an individual whose abdominal cavity was full of blood there was present large numbers of red blood cells. He therefore advocates that only

the clots be removed from the abdominal cavity, since the free red blood cells will be absorbed into the patient's circulation by way of the thoracic duct. The question seems most safely answered by the use of preoperative whole blood transfusion, rather than depending upon a questionable absorption of red cells by way of the thoracic duct or a traumatizing, time-consuming removal of blood from the abdominal cavity, its treatment outside the body and reintroduction into a vein.

Post-operative treatment should be directed toward supportive measures. Heat, enough morphine to keep the patient quiet and comfortable and copious intake of fluids by hypodermoclysis or intravenous administration, supplemented by blood transfusion if necessary are the principal factors that lead toward recovery.

#### CONCLUSIONS

(1) Following accidents, every patient exhibiting shock or evidence of "internal injury" should have rupture or laceration of the liver, spleen or kidney considered.

(2) Diagnostic features are the history of trauma, symptoms of shock, a progressing anemia, a "doughy" abdomen, an area of dullness that increases gradually in size, a crepitant sensation upon palpation of the abdomen, and finally, aspiration of the cavity with a needle to definitely ascertain the presence or absence of free blood.

(3) Operation should be immediately and rapidly done; preoperative transfusion of whole blood should be employed in most cases; splenectomy, nephrectomy, or in the case of the liver secure packing of the rent in the organ by gauze offers the best means of stopping hemorrhage. If time allows auto-transfusion is probably of marked benefit.

(4) The reports in the literature would justify a rather poor prognosis.

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## ESTIMATION OF BILIRUBIN IN THE BLOOD AS AN INDEX OF LIVER FUNCTION\*

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It has long been known that bilirubin and hematin (the iron free portion of broken down hemoglobin), had the same molecular formula ( $C_{16}H_{18}N_2O_3$ ). They were considered isomeric but not identical because bilirubin was thought to be formed only in the liver. Recently the epoch-making work of Mann, Bollman, Magath, Whipple, and others on dehepatized dogs have shown conclusively that the bile pigment (bilirubin) is formed mostly by the spleen and bone marrow, the liver acting as its excretory organ. It seems to be settled that it is a function of the cells of the reticulo-endothelial system, wherever located, to help destroy and remove old or extravasated blood by changing hemoglobin into bilirubin.

Thus the local greenish-yellow pigmentation which forms in and around a bruise is due to bilirubin and constitutes a local jaundice, this being part of nature's method of removing this extravasated blood.

Naturally, wherever reticulo-endothelial cells are most abundant, the greatest amount of bile pigment will be formed, and the spleen is the organ (long called the graveyard of red blood cells), which has the most reticulo-endothelial cells in its makeup. It will easily be seen, therefore, that since bile pigment is formed elsewhere than the liver, other causes of jaundice may obtain besides obstruction of the bile duct. Extravasation of blood or destruction of blood should cause an increase in the bilirubin content of blood. Icterus due to hemolysis, as in hemolytic jaundice, appears sooner than icterus from bile duct obstruction and is of greater intensity. The clinical and research laboratories have recently done wonders in establishing the physiology and pathology of the liver, and have as well devised functional tests to estimate deviations from the normal.

The tests for estimating the bilirubin content of blood, and which seem the most promising, of the liver function tests not only estimates the amount of jaundice in liver disease but is of value in any condition involving destruction of blood. No longer does the physician need say he thinks his patient is bilious. He can have a bilirubin test done and estimate exactly the amount of "latent jaundice" present.

The importance of the liver in the human economy makes any test which throws light on its function of importance. Such tests are made difficult, (1) because on account of its position, they must be indirect, (2) their accuracy is sometimes in doubt because of there being about four times as much liver substance as really is necessary, so that although one area may be diseased, the remainder may do the work with apparently normal function. (3) Any single test may be inadequate because of the liver's many functions, such as carbohydrate metabolism, nitrogen partition, most important of which is making urea from uric acid, bile excretion, detoxication of toxic products as well as other doubtful or unknown functions. In some given disease one only of these functions may be affected.

Blood chemistry has opened up a rich diagnostic field in telling the story of the liver. I will mention briefly the more important tests and their diagnostic capacity.

The Levulose tolerance test has proven of value in diabetes, in studying the carbohydrate function of the liver, but is of little or no value in other liver conditions.

Dye tests have been widely used lately but have been somewhat objectionable because of the toxicity of the dye. Rosenthal and White (*J. A. M. A.*, April 11, 1925), introduced Bromsulphalein (Phenol-tetra-bromphthalein) as a non-toxic dye, with a simple technique. More recently Herr-Epstein recommended Rose-Bengal. The dose is 2 mgs. per kilogram: (the body weight in pounds divided by fifty-five gives the exact amount in cc. of a 5 per cent solution). This is injected into a vein and blood drawn in 30 to 60 minutes at which time no dye should normally be present.

Dye tests roughly estimate the permeability of the liver and its ducts by measuring the ability of liver cells to extract the dye from the blood and excrete it. Any damage to liver cells would probably cause impaired permeability as well as simple mechanical obstruction of the ducts.

Nitrogen partition or protein metabolism is not of very much value in testing liver function. Urea which is formed by the liver from uric acid makes up about 50 per cent of the total N. P. N. of blood. In advanced liver disease only, we find marked changes in the way of low urea percentage of total N. P. N.

McMaster & Elmon (*Journal Exp. Med.*, June, 1925), have shown that urobilin is formed in the intestines by bacterial action on bile. It is then absorbed by the blood from which it is excreted by the liver. Dysfunction of the liver will interfere with excretion and the urobilin will promptly be excreted by the kidneys and found in the urine.

Bile salts are formed in the intestines from bile acids, absorbed and excreted in the same way as urobilin. Gay's surface tension test on urine

\*Read before the Fort Wayne Medical Society, May 25, 1926.

gives a rough estimate of their amount in liver dysfunction. Sprinkle sublimed sulphur on a filtered morning sample. If positive, sulphur particles will immediately begin falling to bottom. The rapidity is an estimate of the amount. This test is very sensitive to the experienced observer.

Levulose and dye tests of liver function show material results only in cases where there is very marked liver damage. Urinary tests for urobilinogen and bile salts are of more value than dye tests in mild liver dysfunction. While it is advisable in order to get as complete evidence as possible to make all tests of value on every case; when only one is practical the new bilirubin test appears to be the one of choice. Bilirubin in small quantity occurs normally as the coloring of blood plasma. The test for it is sufficiently delicate and accurate so that the slightest increase can be estimated. While this is also a test of permeability its possibilities as a help in diagnosis are far reaching.

#### ORIGIN OF BILIRUBIN

Although, as has been stated, the similarity between the bile pigment bilirubin and hematoïden, (the yellowish crystals found in blood extravasations) has long been known they were until recently considered isomeric, having the same chemical formulae, but of different origin. A differentiation was therefore made in that true icterus was of the liver, while the discoloration around an extravasation of blood was called a local hemorrhagic icterus. Whipple and Hooper (*Jour. Ex. Med.*, 1923) were first to show by intravenous injections of hemoglobin in dogs, whose liver was excluded from the circulation, that the yellow color of the blood plasma deepened and that the coloring matter was chemically bilirubin. Whipple attributed the formation of bile pigment in so far as the liver itself was concerned, to the reticulo-endothelial cells of the liver, known as Kupffner cells.

Rich and Reinhoff (*Johns Hopkins Hosp. Bulletin*, June, 1925) and others have found that there was appreciably more bilirubin in the veins of the spleen than its arteries. This was also found to be true of blood after it transverses the bone marrow.

Krumbhoor (*Arch. Path.*, May, 1926) has shown that after splenectomy it was more difficult to produce jaundice by hemolytic agents. Rich has presented evidence that cells of the reticulo-endothelial type anywhere in the body can form bile pigment. This type of cell is represented largely by the phagocytic cells of the spleen, although they occur elsewhere, i. e. the Kupffner liver cells, the phagocyte cells of the bone marrow and lymph glands, the clasmatoocytes of connective and the large mononuclear cells of blood. The abundance of these cells elsewhere in the body would explain any adjustment in bilirubin formation necessary after splenectomy.

It remained for Mann and Magath of the Mayo

clinic (*Am. Jour. Phys.*, July, 1925) by their epochal experiments to prove on dehepatized dogs that bilirubin was formed at a definite rate outside the liver, which only acts as its excretory organ and that in fact the most of the bilirubin formed in the body was formed in the spleen, and bone marrow. They removed the liver of some fifty dogs, keeping them alive up to twenty-four hours. In every animal living over six hours, jaundice developed and injections of free hemoglobin increased the jaundice, likewise the bilirubin content in the blood and tissues. Incidentally their observations included the facts that uric acid accumulated in the dogs' blood while urea disappeared from the urine. The dogs died soon from glycoanaemia, unless glucose was administered intravenously. They also noted that the muscles took glycuronic acid from the blood sugar without liver action. Mann's observations leave no doubt that not only are bilirubin and hematoïdon identical, but that bilirubin is the form in which free hemoglobin in the blood is excreted. Therefore the amount of bilirubin in the blood plasma from day to day constitutes an index of the amount of red cell wastage, whether normal or abnormal.

Thus the origin and source of bilirubin appears to be definitely proven, i. e., formed by reticulo-endothelial cells of the spleen and bone marrow from the free hemoglobin of broken-down red cells. The term icterus therefore takes on a new meaning. We can no longer think solely of failure of liver function when we find bile pigments in the skin and urine. Any pathological condition which throws free hemoglobin in the blood will increase bilirubin and if sufficient in amount will appear clinically as jaundice. The term "disassociated jaundice" has been used in hemolytic jaundice where bile pigment appears in urine unaccompanied by bile salts. As an explanation of hemolytic jaundice it has been shown that the large amounts of bilirubin formed by red cell wastage overwhelm the normal liver, blocking its capillaries, thus producing mechanical obstruction. Following these discoveries two methods have been introduced for the estimation of bilirubin in blood plasma; that of Muelengracht, which is a scale index, and that of Van den Bergh, which is an accurate quantitative estimation.

Bilirubin as has been shown, is the normal yellow coloring of blood plasma. This color deepens in hemolytic processes like pernicious anaemia, hematoma, malaria, internal hemorrhage, duodenal ulcer, pneumonia, ectopic hemorrhage and poisoning. It increases in certain pathological conditions as result of liver dysfunction, such as diabetes, endo-carditis, with enfarts, cardiac insufficiency, typhoid and para typhoid fever, cholecystitis, cholelithiasis, hepatitis. and is highest in cancer of the liver, occlusion of the common duct and catarrhal jaundice.



In secondary anaemia, there being less hemoglobin in the body to form bilirubin, we find the serum paler than normal, due to lowered bilirubin content. This constitutes an important differential diagnostic test as between secondary anaemia and primary anaemia in which bilirubin is high.

Incidentally the anaemia of gastric cancer has been shown not to be hemolytic in character, since the bilirubin content of plasma in this disease is not above normal.

Obviously, in liver disease where jaundice impends, the bilirubin content of blood will be materially increased before the jaundice is clinically apparent, making this test exceedingly important, in diagnosing this so-called latent jaundice.

#### TECHNIQUE OF MUELENGRACHT'S TEST

Three or 4 cc. blood are drawn, centrifuged and clear serum pipetted off. Using a 1-1000 solution of potassium dichromate as a standard (or a permanent glass standard) the serum is compared with it in a Bock-Benedict or Klett colorimeter. The result is expressed by a number known as the icterus index. The normal range or zone runs between 4 and 6, (equivalent to 1. to 3. parts per million of bilirubin) the whole range being divided into zones. The latent jaundice zone is between 6 to 15, while the clinical jaundice zone is above 15 and up to 150. The objections to this method are that it cannot be done on any serum that is cloudy or tinged with hemoglobin nor on any serum colored by food pigments as from eggs, oranges or vegetable colors like chlorophyll, xanthophyll or carotin. The eating of one carrot has been known to raise the index to 10. This test must therefore be done after careful regulation of the diet.

#### VAN DEN BERGH TEST

To 1 cc. of serum add .5 cc. fresh diazo reagent. After 1 or 2 minutes add 2.5 cc 96% alcohol and 1 cc. sat. sol. ammonium sulphate. Mix and centrifuge. Use supernatant fluid for the quantitative comparison. Compare by colorimeter with a standard bilirubin solution, using Ferrous ammonium alum as an artificial color standard. The standard properly diluted represents five parts per million of bilirubin. The normal range is from 1 to 3 parts per million.

Since it is impossible to obtain bilirubin powder for use in making a standard solution, an artificial color standard must be used. Ferrous ammonium sulphate was originally recommended. This has two drawbacks. One is it must be put through a process to develop the color and extracted with ether each time the test is made. The color is not the same and the comparison must depend on estimating the depth of color rather than matching colors. Besides one has the possibility that by evaporation of the ether, the strength of the standard may change during manipulation. McNee has recommended an aqueous solution of Cobalt sulphate as having the

advantage of simplicity and greater permanence. This chemical, however, also does not produce the exact bilirubin color. In my laboratory we have found that the ordinary N/10 solution of potassium permanganate, properly standardized, very nearly matches the bilirubin diazo color in proper dilution. In the absence of any bilirubin powder, we were compelled to standardize it against the Ferrous ammonium sulphate solution. We found that .7 cc. of N/10, permanganate diluted to 50 cc. made a standard which matches the Ferrous ammonium sulphate. We recommend this standard for its close similarity of the bilirubin diazo color, its simplicity, permanence and because it is a stock solution in every laboratory.

The common laboratory procedure is to use both tests routinely, the simpler Muelengracht test if the serum is suitable, if not, the Van den Bergh, which can be done on any serum.

The following observations on the Van den Bergh test have been made and reported by various observers.

(1) Sources of error are minimum as colored or cloudy serum does not interfere.

(2) Detects latent jaundice where clinical evidence is not present.

(3) Its accuracy in estimating the amount of jaundice whether light or grave as against the dye test in conditions which may produce only slight jaundice, like cirrhosis of the liver.

(4) Differentiates between primary and secondary anaemia.

(5) The reaction increases parallel with severity of diseases like catarrhal jaundice, subacute atrophy of liver, cardiac failure, cancer of the liver, pernicious vomiting, pneumonia, eclampsia, acidosis, etc.

(6) Very high values indicate fatal jaundice.

(7) Is of prognostic value in pneumonia and cardiac insufficiency, high curves predicting fatality.

(8) Is increased in duodenal ulcer probably because of inflammation and adhesions around gall ducts but normal in gastric ulcer, a differential point.

(9) In trichinosis where widals are often positive, is normal, thus excluding typhoid in which bilirubin values are high.

(10) In operative cases a rising bilirubin curve indicates danger of congestion and hemorrhage.

(11) Is increased somewhat in pregnancies but goes up in pernicious vomiting and very high in eclampsia.

(12) As between obstructive, non-obstructive and hemolytic jaundice, however, the only points of differentiation pointed out are that in hemolytic jaundice, the increase is more rapid, while in the jaundice from gall duct obstruction, from liver dysfunction or cancer, the bilirubin curve goes much higher than in any other conditions.

## LIGHT AND LIFE\*

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Life is that positive, active, progressive, adaptive force by which heterogeneous masses of colloids of variable chemical composition are able to maintain successful adjustment with their environment. The physical basis of life is protoplasm. Protoplasm is that complex of chemical elements and compounds, mostly colloids, surrounded by semipermeable membranes, which form those gross units of structure and function, termed cells. From the bio-physical standpoint, cells are energy transformers, in which the environmental energies which each must receive in order to continue functioning properly, are handled by the colloids, in accordance with their power of penetration through the ectoplasm or plasmodial membrane, and the various other lipoidal semipermeable membranes. The latter, including the nuclear membranes, serve to separate colloids of opposite chemical affinity—and hence maintain polarity and electrostatic potential.

Light or radiant energy is force transmitted in the form of waves resulting from periodic vibration or rotation of electrons. Light and life are similar in that both consist of phasic variations in matter, but the former is physical and non-adaptive, the latter bio-chemical, adaptive, and grossly chemical rather than ultraminutely electronic. Light precedes life both phylogenetically and ontogenetically. Light provides the environmental energies of heat, visible radiations and ultraviolet light, which together with water, carbon dioxide, fixed nitrogen and minerals are constructed by photosynthesis within plants into the organic compounds upon which animals subsist. The green coloring matter of plants—chlorophyl—of prime importance in this process, is selectively absorptive for ultraviolet radiation. Likewise, the red pigment of animals is selectively absorptive for the shorter invisible rays of the solar spectrum, and is probably one of the important mechanisms by which this agency is transmitted throughout the body. Hematoporphyrin, a derivative of both chlorophyl and hemoglobin is a photosensitive agent of great power—two hundred milligrams of which injected into the blood stream of a human subject produced such marked sensitivity to light that the subject was forced to remain indoors during the daytime for sixty-three weeks. Experimental irradiation with a quartz mercury vapour lamp, with what was ordinarily an intensity insufficient to produce any effect, produced blebs and itching the entire period of sixty-three weeks. Duke, of Kansas City, has written extensively upon the subject of physical allergy, or marked suscepti-

bility of certain individuals to solar radiations, some to heat and others to ultraviolet light. The reaction is akin to anaphylactic shock, and while it is as yet not thoroughly understood, its occurrence is by no means rare, and should be taken into account by everyone dealing in any way with the subjects of light in its relation to life, health or disease. Light, which ordinarily exerts not only a benign but a vital influence upon all protoplasm, may, when improperly administered to a highly susceptible individual, cause a more or less prompt exitus lethalis. It might not be out of place at this point for us to parenthetically insert with our hearty endorsement the recent recommendations to the profession of the Council of Physical Therapy of the American Medical Association. "Physical Therapy should be practiced only as one of the triad of medicine, surgery and physical therapy. It should never be prescribed except by a physician thoroughly trained in the use of physical agencies." Further, "the sale of generators of ultraviolet radiation to the public for self treatment is entirely without justification."

It is not the object of this report to discuss either heliotherapy or actinotherapy, but rather consider the *modus operandi* upon which phototherapy is based. As is so often the case, clinical medicine is here once more greatly indebted to pure science for an understanding of the basic principles underlying modern scientific light therapy. Before summarizing the physiological data, as gleaned from the numerous publications on this subject, we might consider briefly the two diverse factors always to be dealt with in any experiment in biology. These are, first, variations in the intensity, quality and duration of application of the active agency—in this case the various sources of light; and second, the complicated reactions in the biological object, especially if this be human protoplasm.

Variations in the first factor are obviously more easy to control. This control may be exercised by utilization of the various instruments of precision, photometric observations, selective filtration of spectral energies, the use of monochromatic light, or artificial sources of radiant energy from which either the heat radiation, visible light, or the various octaves of ultraviolet may be eliminated. It is obvious that if the agency is known to vary from time to time in intensity, quality or duration, such as solar radiation, or the use of certain artificial arcs not operating at constant intensity, or that if both long and short wave energies are transmitted at the same time, that the results are vitiated at the start.

There is evidence of an antagonistic action between the higher and the lower frequencies of radiant energy, the shorter waves, such as ultraviolet, acting more superficially, the energy being transferred to the electrons of which the atoms

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are composed, and producing chemical effects, whereas the longer waves, such as infrared or dark heat are more penetrant, the energy is applied to the entire atomic mass and thermal effects are produced. Clinically, we note the immediate effect of heat is vasodilation and relaxation of both smooth and skeletal muscle, whereas the immediate effect of ultraviolet is either not measurable or else that of vasoconstriction and sympathetic nerve stimulation.

Variations in the biological substratum cover the entire field of medical diagnosis, but deal particularly with alterations of metabolism and sensitivity to physico-chemical agencies. In addition factors which must be considered are, structural peculiarities, resistance factors in the transmitting medium whether skin, mucosa, cornea, or whether radiation of the blood is direct, the presence of hemoglobin or melanin in the radiated animal, etc. After taking all of these into account, it is evident that some of the following data may be revised by subsequent work, but the following appear to be chief effects of the following radiations:

*Ultraviolet Radiation:* Wave lengths shorter than 400 millimicrons. Skin penetration—the amount of radiant energy which penetrates the skin, and which is shorter than 290 millimicrons, is practically nil. Note that 290 millimicrons is also the limit of atmospheric transmissibility. In other words, human protoplasm is adjusted only to longer wave lengths, and shorter ones than 290 millimicrons are extraenvironmental or abiotic. Maximum skin effect-erythema and subsequent pigmentation is 297 millimicrons. This energy is present in both solar and artificial radiations, but not in glass, which fails to transmit shorter than 320 millimicrons.

*Calcium:* Calcium fixation is due to spectral zone 302 millimicrons. Note that this zone is near that causing maximum pigmentation, and also just barely too short to be transmitted by ordinary window glass. Blood calcium, if below normal, is increased by prolonged treatments of gradually increasing duration, given daily. If the blood calcium is already high, there is no constant effect, but it is not further increased.

*Cholesterol (ergosterol):* The above spectral zone, 302 millimicrons, activates the unsaponifiable fats of the blood stream, or in vitro. In either case when administered to animals it increases the blood phosphorus, and the deposit of calcium phosphate in bone, hence preventing or curing rickets.

*Blood counts after prolonged ultraviolet via the skin:* Red cells, hemoglobin, leukocytes and polymorphs increased. A fall in blood sugar, nonprotein nitrogen, uric acid and creatinin.

*Blood counts immediately after irradiation through the skin:* Red cells, hemoglobin, viscosity unchanged. Coagulation time unchanged.

White cells show a fluctuation—first an increase, then after six hours a decrease—in other words, a leukopenia with a relative lymphocytosis. Blood platelets increased after a few hours.

*Complement content* after prolonged single radiation of guinea pig: Complement increased first hour, then gradual decrease to zero. The guinea pig dies after three hours' radiation. Irradiation of fresh guinea pig serum inactivates the complement.

*Effect of darkness,* plus mild physiological infrared: Blood platelets and red cells decreased. White counts, no constant change but tendency toward a relative preponderance of polys over the lymphocytes.

*Effects of direct relation* of blood—in vivo—through quartz tube: This work of Reed was carefully done, but in order to prevent clotting heparin was used, which may have modified the result. Dogs under ether were irradiated by carbon arc light. Blood calcium not appreciably affected. Coagulation time decreased. Blood pressure, a marked general depression of arterial pressure. This effect was obtained, however, when both ultraviolet and infrared were filtered out. Red cells and hemoglobin, no constant changes. White cells, marked leukopenia with relative lymphocytosis. Dioxyphenylalanin, the forerunner of melanin pigment, as tested by the same test as for uric acid, 38 per cent increase. Control animals not irradiated showed only 2.7 per cent increase.

*Electrophoretic potential*—a pronounced reduction in negative electrophoretic potential of the red cells followed direct irradiation of the blood in vitro. Its significance is not evident at present, but according to Reed, might possibly be due to the liberation of negative electrons into the blood under the influence of the irradiation.

#### SUMMARY OF PRESENT AVAILABLE DATA

*Biologic:* Ultraviolet radiation via skin produces erythema, melanin deposit (tan) increase of blood calcium and blood phosphorus, activates blood cholesterol, fixes calcium as calcium phosphate in bone, and other tissues. The hemoglobin is increased, red cells slightly less so, white cells usually decreased with a relative lymphocytosis. Blood platelets are increased and coagulation time decreased.

*Infrared and darkness*—produces no skin pigment, a decrease of blood calcium and phosphorus, calcium demobilization and rickets. There is anemia, a lowered red cell and hemoglobin, a leukocytosis with a relative polymorphonuclear predominance. Blood platelets are decreased and coagulation time increased.

Direct irradiation of the blood in vitro does not give rise to any immediate change in red cells, hemoglobin, blood calcium, blood sugar or carbon dioxide combining power. It is evident then that these effects are brought about slowly as a result

of systemic reactions, intermediated either via the vegetative nervous system, irradiated cholesterol or by autocoids, possibly activated and released from the skin. Direct radiation of the blood does produce a marked fall of pressure, a marked leukopenia and a marked rise of a compound tentatively identified as dioxypyphenylalanin, the forerunner of melanin pigment. The fall in pressure is not, however, solely due to ultraviolet irradiation, but may be caused by ordinary visible light. Its mechanism is probably along the same line as that obtained by protein shock, the proteins of the blood being sufficiently altered to produce an anaphylactic state, with overactivity of the parasympathetic nervous system. The production of leukopenia by direct irradiation is much more marked and constant than that via of the skin, but probably the mechanism is the same, by direct effect upon the circulating cells. The increase of dioxypyphenylalanin to such a marked extent after only one and one-half hours irradiation, has an important bearing on photopigmentation, and may help explain the fatal issue reported in both pellagra and Addison's disease after ordinary quartz light irradiation. The marked change in electrophoretic potential, at present of more academic than practical significance, may, when fully investigated, yield results far outweighing in value all the other work yet done in the investigations as to the physiology of light.

Mention has been made as to the three possible routes by which light may influence the body through the skin. It seems reasonable to suppose that probably all three are utilized by the body, at different times and for different wave lengths. At present the weight of both experimental and clinical evidence appears to favor the route of transmission via the blood. Macht, by inserting a spectroscope beneath the skin, showed that penetration of ultraviolet light of the biological wave lengths is possible even down to the larger capillary vessels of the corium. Cholesterol is known to be a constant ingredient of the blood, and calcium fixing properties have been proved to be transmitted by irradiated cholesterol and other unsaponifiable lipoids.

On the other hand, the intimate relationship between ectoplasm and nervous energy; the phylogenetic and ontogenetic development of the nervous system from the ectoderm, or ectoplasm, or primitive skin tissues which have always borne the brunt of environmental contacts, the demonstration of skin receptors for heat, visible light, and possibly for ultraviolet radiation, the latter via the sympathetic nerve terminals; the close functional relationship between the sympathetic nervous system and the adrenals, and thyroid (all being derived from the ectoderm, and all supplying the somatic tissues with a kinetic drive); the relationship of the adrenal cortex with

pigment formation, and of the product of the adrenal medulla with prompt amelioration of the various symptoms of allergy; the clinical efficacy of ultraviolet radiation mildly used in the same sort of conditions, whether local in the skin and mucous membranes, or whether in the bronchial tree; all these factors make a *neurogenic* transmission at least possible. With regard to the factor of autocoid transmission, there is no evidence as yet available. It should be remembered, however, that gross involuntary activities are under the control of a reciprocally interacting and compensatory neurochemical mechanism, composed of the sympathetic—ectodermic—catabolic agencies on the one hand, and the parasympathetic—endodermic—anabolic structures on the other. It is not possible always to draw a hard and fast line between these two interacting forces, and the human body is so constituted as to be able to maintain a position of dynamic equilibrium between all of the antagonistic forces which act upon it.

However, in this regard the essayist, although fully cognizant of the danger of any attempt to simplify this problem by rationalization, offers the following provisional summary as to the antagonistic activity of radiant energies, and their effects upon the neurochemical control mechanism of vertebrate animals, including man.

Ultraviolet, or short-waved radiant energy, mildly stimulates metabolism via the sympathetic nervous system and the blood stream. Its primary effect is to produce an increase in blood pressure when thus mediated; to increase clotting ability of the blood, catabolic endocrines, adrenal and thyroid activity, and a general stimulation of the whole kinetic mechanism. In overdose, immediate contrary effects occur, and symptoms of anaphylactic shock, possibly from the destruction of skin protein and its absorption as a foreign protein. In susceptibles, this effect may arise immediately from ordinary dosage. In every case, even if mildly rayed, there is a tendency after the lapse of a few hours to erythema, or dilatation of the skin capillaries, and even exudation, and this increased to vesiculation with the heavier doses. This phase is the compensatory after-reaction in which the opposite vasodilative mechanism is brought into play. Now, instead of vasoconstriction, there is vasodilation, or parasympathetic activity, such as one gets immediately with the use of heat, or infrared, or diathermy.

In addition to this gross mechanism, there is some evidence of a cellular and intracellular activity of light frequency antagonisms of the same sort. Endothelial permeability is increased by heat, and vasodilation and exudation result. In the skin this evidence of irritability is increased by excess of potassium and deficiency of calcium, as determined by actual chemical analysis. On the other hand, increased calcium in the skin and



ultraviolet radiation properly used, quiet irritability and itching; desquamative, weeping lesions are dried up with remarkable facility. That this effect is exerted chiefly upon the capillary endothelium is taken for granted. However, in the light of recent researches by Clowes and Lillie, it seems reasonable to assume that a similar physico-chemical relationship, or salt antagonism, exists in every living cell. By this conception, protoplasm exists as colloid, a water soluble substance in a disperse phase of oil, the semipermeable membranes. Calcium, being insoluble in water but soluble in oil, has, according to Lillie, a very important function in the regulation of the permeability of the various lipoidal membranes. In this regard sodium, or potassium (monovalent kations) possess a reciprocally antagonistic action. Too much calcium means too little penetration, lack of oxidation, etc., whereas too much potassium means too free an ingress and egress of electrolytes to and from the cell. In the artificial cell-like emulsions which Clowes has prepared from mixtures of water soluble and fat soluble substances, he has found that a state of dynamic equilibrium is established when they are subjected to an aqueous environment consisting of one or two parts calcium to a hundred parts monovalent kations, the same proportions which are existent in both mammalian blood and seawater. Lillie in his excellent treatise on "Protoplasmic Action and Nervous Action," after emphasizing the importance of the above colloidal-lipoidal interrelations, describes the effects thereupon of the physical energies of light and heat. These have the effect of modifying the permeability of the cell membranes. This work is yet to be verified, but we can at least agree with Clowes, that in this regard we are dealing with a hitherto unknown physical principle in biology.

#### CONCLUSIONS

1. The cell is the unit of life, and is a transformer of energy.
2. The chief feature of this energy transformer is its ability to maintain an equilibrium between opposing physico-chemical forces which are constantly tending to gain the upper hand. Life, then, is a constant battle waged in protoplasm by the colloids through their protective lipoidal membranes with their environment.
3. At all times environmental forces are at work—air, light, heat and ultraviolet. When these are properly balanced, the organism is benefitted. Otherwise it is harmed.
4. Life then is an event, not a thing. Life is a colloidal event, the colloids of the protoplasm of the organism being the disperse phase; the environmental forces acting through the semipermeable membranes being the dispersing phase. When the phases are in dynamic equilibrium life persists, but with breaking of the equilibrium, the disperse phase is no longer

maintained, intracellular potential becomes neutral and the cell or organism is dead.

#### THE DIAGNOSIS AND TREATMENT OF DISEASES OF THE THYROID GLAND\*

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In such a short dissertation as this it is obviously impossible to mention any except the salient points concerning the diagnosis and treatment of diseases of the thyroid gland. Without further introduction regarding this very important subject, I wish to present a classification for goiter which I use because of its brevity and simplicity. A great deal of the misunderstanding that exists regarding goiter is due perhaps to the elaborate and lengthy classification that interests neither the general practitioner nor the specialist. It is generally recognized that goiter may be either nontoxic or toxic.

In the group composed of non-toxic goiter



No. 1

1. Colloid Goiter, such as seen in the majority of young girls in the middle west.

there are two types, the colloid, which has been variously termed simple, hyperplastic, or physiological enlargement, and the adenomatous goiter, also termed simple or endemic.

In the United States these forms of goiters are commonly associated and are prevalent throughout the northern half of the country. The great goiter belt extends all the way from Boston to Seattle. In certain areas, such as the middle and far west, a higher percentage of the population is afflicted than in other regions. Unquestionably these forms of goiter are increasing in spite of our efforts for prevention and their occurrence is becoming more widespread. Usually the colloid type, which is really a symmetrical enlargement of the gland, probably due to a failure of the thyroid to supply the demand of the tissues with sufficient thyroxin, precedes the adenomatous form. Occasionally the latter type appears first and is seen in very young children. In the past too little attention has been paid to these apparently innocent enlargements of the thyroid

\*Presented before the meeting of the New York Physicians' Association at the New York Academy of Medicine, January 26th, 1927.

gland. Parents have been wrongly advised that they were merely physiological enlargements to be left alone until they caused trouble. This advice has undoubtedly been responsible for a large number of goiters coming to operation that might have been prevented by early medical measures. Apparently the majority of these goiters begin to appear when the child reaches the period of most rapid physical development, commonly termed the "growing age." If a goiter is to be prevented, treatment should certainly be begun before this time, and continued until maturity. The brilliant work of Marine and his associates in this field is too well known for further discussion of this problem. No one has supported this splendid work with greater enthusiasm and interest than my associates and myself. It is with some reluctance, therefore, that I mention these facts. For the past four years we have had several hundred children between the ages of six and twenty-one under close observation for the treatment and

iodine or other medical measures, the point to determine is, when should they be considered surgical? They rarely enlarge before the age of twenty so as to cause marked disfigurement or discomfort and require removal. After this age I advise the majority of patients to have the goiter removed at their convenience, not as a matter of necessity but as a question of protection for the future. Why wait until hyperthyroidism with its multiplicity of complications, or malignancy, or intrathoracic pressure occurs, before advising operation? Every adenoma of the thyroid is a tumor, and hence a potential source of malignancy. They may degenerate and become cystic, calcareous, or hemorrhagic, giving rise to various forms classified as distinct types in the older texts. Substernal or intrathoracic goiters may remain dormant for years and then suddenly enlarge, manifesting their presence by causing dyspnea, dysphagia or tracheal irritation.

In the second or toxic group of goiter cases



No. 2

2. Exophthalmic Goiter—Basal metabolic rate plus 74 per cent after Lugol's, plus 52 per cent, on discharge, plus 7 per cent.



No. 3

3. Same patient three months after operation. She had regained normal weight and strength.

prevention of goiter. Our results in various series, in which practically every preparation of iodine as well as thyroid gland in different amounts was used, have on the whole been disappointing. We have by no means been able to repeat the splendid results obtained by Marine and his workers in their studies with the school children of Akron and Cleveland. This preliminary suggestion is made with no attempt to disparage the achievements of these workers not in any way to discourage the results of their efforts. I have always advocated and am continuing to advise the use of iodine to prevent goiter, and I will continue to do so unless more effective remedies are found. However, it is my conviction that while iodine may prevent goiter, it is not sufficient in the actual treatment of the majority of colloid goiters, and of course has no effect on the treatment of the adenomatous type. For the present our efforts should be concentrated on the prevention of goiter, while searching for more adequate means of treatment. Probably iodine is needed, but it is not being absorbed.

Since adenomatous goiters are not amenable to

are the two main types, adenomatous and exophthalmic. The former may be subdivided into iodine hyperthyroidism, in which class, toxicity is induced by the injudicious use of iodine in a previously non-toxic adenoma, and the type described by Plummer as multiple toxic adenoma.

An adenomatous goiter does not become toxic before the age of thirty, unless provoked by iodine. The syndrome that develops from the indiscriminate use of iodine was recognized by Kocher and Breuer, and on account of its resemblance to exophthalmic goiter was termed iodine-Basedow. Reports of such cases have appeared in the literature from time to time, and have been considered as cases of exophthalmic goiter induced by iodine. This gave rise to the widespread misconception that iodine was a dangerous remedy in the treatment of exophthalmic goiter. Inasmuch as the clinical symptoms of iodine-Basedow differ from that of toxic adenoma and exophthalmic goiter, and also the pathological picture varies markedly from the latter, it seems to me that this condition should be considered as



a distinct clinical entity, for which I have suggested the term iodine hyperthyroidism. Some time ago I reported a series of fifty such cases in which Lugol's solution of iodine administered by family physicians was responsible for six of the cases in this series, including three that terminated fatally. Eight patients were treated by the same physician. In seven cases patent medicines were responsible for the development of toxicity. The average age of the patients in this series was thirty-five years. Tremor, nervousness, loss of strength, and insomnia occur as in the other forms of hyperthyroidism. The onset of symptoms, however, closely resembles that of exophthalmic goiter because of its short duration, which is about two months. There is a characteristic form of nervousness, a rapid loss of weight without the typical variable appetite observed in patients with exophthalmic goiter. Likewise thrills and bruits are not found. The blood pressure findings are not of diagnostic import-

quadriceps weakness, may arouse suspicion of the true condition. The presence of an adenomatous goiter together with an increased basal metabolic rate may confirm the suspected diagnosis. The surgeon is then confronted with a bad risk patient, in whom operation should have been performed before the development of the secondary lesions.

In marked contrast is the rapid onset of toxic symptoms in exophthalmic goiter. This seldom exceeds three or four months. Usually there is a rapid loss of weight, accompanied by a variable appetite that may be ravenous. This symptom is observed in no other form of goiter, nor in any other disease except perhaps diabetes. Of diagnostic importance is the presence of thrills and bruits in about 75 per cent of the cases. The blood pressure findings are likewise in contrast to those observed in toxic adenoma. In this condition a hypertension occurs, but in exophthalmic goiter the diastolic pressure is characteristic be-



No. 4

4. Multiple non-toxic adenoma causing considerable dyspnea.



No. 5

5. Same patient after operation.

ance as in the two other types of toxic goiter. The basal metabolic rate averaged plus 29 per cent as against plus 51 per cent in an equal number of cases of exophthalmic goiter.

I am aware that Marine and his associates do not recognize the separation of toxic goiter into the groups of multiple toxic adenoma and exophthalmic goiter, as described by Plummer in 1913. While this classification is now generally recognized in the middle west, it will be of great interest to me if Dr. Marine will consider this question in his discussion. Adenomatous and exophthalmic goiter are commonly observed in about 25 per cent of the cases. An adenomatous goiter invariably develops before the age of twenty, and is present twenty years or more before toxic symptoms occur. Possibly one-half of these goiters are toxic in persons fifty years of age. The onset of symptoms is so gradual and insidious as to be frequently overlooked for years. The patient may undergo treatment for high blood pressure or nephritis because the toxic secretion from the goiter attacks the cardio-renal-vascular system. The gradual loss of weight and strength, the development of a tremor, the characteristic

cause it is low, while the systolic pressure is normal or slightly elevated except in long standing cases. Exophthalmos does not occur in toxic adenoma, but is observed in 50 per cent of the cases of exophthalmic goiter within three months of onset. The peculiar type of nervousness seen in this latter disease is typical and has been aptly described by Plummer as purposeful movements without any purpose. The patients are constantly changing their position, fingering their hair, or picking at the bed clothes. The disease progresses by a series of waves at the crest of which a crisis occurs, with prolonged vomiting and diarrhea. This symptom does not occur in the hyperthyroidism of adenomatous goiter. Finally, the basal metabolic rate is seldom over plus 60 per cent in this kind of goiter, but in the exophthalmic form, higher rates than this are of common occurrence.

The treatment of the various forms of toxic goiter is surgical with a careful preoperative and postoperative medical regime. Operative interference in cases of long standing toxic adenomatous goiters may be performed with considerable risk, but is the only means of checking the disastrous effects of the disease. The risk of op-

eration for exophthalmic goiter has been materially reduced since Plummer's discovery of the efficacy of iodine in the preparation and after care of the patient. In 1922 we abandoned the ligation and stage operations and this has not only reduced the period of hospitalization, but has lessened the discomfort and financial burden to the patient. Our patients are seldom in the hospital for more than ten days, and those who are prepared at home are discharged on the fifth or sixth day. Long standing cases in which cardiac decompensation has occurred naturally require longer periods of preparation. Iodine is given in doses of ten drops six times a day until the patient is considered safe for thyroidectomy. This dosage may be doubled during the first twenty-four hours after operation. The success of the operation depends upon the ability of the surgeon to remove as much gland as possible, and yet preserve the integrity of the parathyroid glands and the recurrent laryngeal nerves. The use of the combined morphine-scopolamine-novocain form of anesthesia has simplified the operation and diminished the possibility of pneumonia. The cure of the patient does not end with the operation, but is dependent upon a careful post-operative regime.

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## ABDOMINAL PAIN—WITH AN ANALYSIS OF ONE THOUSAND CASES

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FORT WAYNE

The object in attempting to consider such a vast subject as abdominal pain is not primarily to discuss all of the acute infections which are essentially medical, and these are legion, but rather to review the pathologic conditions encountered in a fair representative number of cases seeking surgical relief.

Naturally the percentages vary widely among different individuals and localities and those hereinafter given present purely a personal interesting study of what was found when at least one of the main complaints was pain in the belly.

Pain is considered here in its generic sense with no direct attempt at specific classification as to its being sharp and colicky, dull and aching, constant or intermittent, or likewise whether high within the abdomen or within the pelvis, localized or diffuse and finally whether of an abrupt onset or of a course of many years, except to mention it in connection with the cases as cited.

As stated by Pfaff that a sudden persistent pain within the abdomen should always put the physician on guard for an acute surgical condition, so also should we be warned by a chronic

and recurring pain in this area even though it be tolerated with fortitude by the patient.

It is indeed seldom that one finds pain *per se* within the belly, either subjectively or objectively. It is commonly radiated to or accompanied by pain in the back, the lower pelvis, inner sides of the thighs, testicles, penis, or above into the chest, the shoulders or even the arms. This is especially true of the chronic persistent or recurrent type and often only the preponderance of the localization within the belly furnishes the objective index of the underlying pathology. The associated symptoms of nausea, vomiting, and fever in the acute forms always add to the gravity of the symptom complex, while loss of weight and strength with tumor formation do likewise with those of chronic nature.

Of the thousand cases reviewed in this series it is interesting to note that 340 or 30.4 per cent were attributed to disease of the appendix and that in the vast majority the pain symptoms were permanently relieved by appendectomy. Of this number 168 were of the chronic recurrent type with pain having had a duration, in the longest recorded case, of thirty-eight years and in the shortest, of three weeks. The average time was sixteen months approximately. The usual pain complained of was dull and aching in character, in the right lower abdominal quadrant, with sharp colicky twinges, at irregular times, beginning in the region of McBurney's point and radiating toward the umbilicus. Nausea was frequently present but seldom actual vomiting.

The acute catarrhal type with no clinical evidence of previous attacks was noted in forty cases. The pain in these was almost invariably of maximum intensity over McBurney's point which area likewise possessed the greatest tenderness on deep palpation. It was, however, almost always preceded by epigastric and general belly pain localizing within a few hours to the lower right abdominal quadrant.

Gangrenous appendicitis, with actual necrosis of the walls of the appendix, without perforation, but with often a surrounding envelope of thick purulent exudate, was found in seventy cases. The symptoms as a rule were more severe with reference to abdominal pain but were essentially the same in location. The onset was also usually more abrupt.

Perforation of the appendix was encountered in forty cases. The sudden cessation of right lower quadrant pain with temporary relief, followed by recurrence of a general belly pain and tympany was experienced and described by twenty-nine of these cases. Nine were in children where personal histories were of questionable value. The mortality of this series of perforations was twelve and one-half per cent. Periappendiceal abscess was seen in ten cases. Appendiceal enteroliths with little other gross pathology were apparently the cause of lower



abdominal pain of chronic nature in twelve cases.

Following appendicitis as a cause of belly pain, gall bladder disease was noted, and in its total reached 113 cases, or 11.03 per cent. The usual pain complained of, excluding acute attacks of gall stone colic and acute cholecystitis, was of a heavy, aching character in the epigastrium "as of a croquet ball" being lodged there. This was equally common under the right rib margin and was almost constantly accompanied by gaseous distention of the upper abdomen with eructations, nausea and occasional vomiting. Upon temporary relief from the pain a sense of soreness persisted, often remaining for several days. A history of jaundice was obtained in less than 20 per cent of cases proving to have had gall bladder disease. Twenty-seven cases of so-called simple chronic cholecystitis were observed.

Gall stone colic is too familiar to review at length except to mention that the epigastric and right hypochondriac pain, so violent and sudden in its usual onset, is seldom localized in these areas but is radiated through to the back, and is not commonly associated with the fever, rectus rigidity and leucocytosis to the same degree that one finds in an acute purulent invasion.

Chronic cholecystitis with cholelithiasis was found in sixty-nine cases. All but one of these cases presented multiple calculi, except one which was a single large and almost complete cast of the gall bladder. Small stones predominated.

Acute cholecystitis was accompanied always by a preponderance of pain in the right hypochondrium over the gall bladder. Deep tenderness over this area was similarly present with considerable right rectus rigidity, fever and leucocytosis. Jaundice was noted in three cases and was not severe in the total of fifteen cases of this type of cholecystitis.

A frank empyema of the gall bladder was seen in twelve cases. The pain symptoms were essentially the same as in acute cholecystitis except more severe and accompanied with a greater general toxicity.

Cholangitis was encountered in nine cases and was characterized by chills, high relapsing fever, and a general clinical picture of sepsis. A slight icteric tint to the skin was noted in all of these cases and two developed a marked jaundice before death. A history of pre-existent pain except more severe as in an acute cholecystitis was generally elicited. Six of these cases died, the average duration of the sepsis being nine days.

Ranking next to gall bladder disease in numerical value was the nonsurgical condition of pyelitis. This was observed in seventy-two cases, or 7 per cent. It is surprising how an acute pyelitis can simulate an acute surgical belly. It is helpful clinically to remember that the fever in

pyelitis is usually much higher than in an acute appendicitis in proportion to the toxicity portrayed, ranging from 101 to 103; that chills are more common in pyelitis; that nausea and vomiting are much less frequent and that deep pressure over the infected kidney is often more painful than over McBurney's point, and that finally the actual demonstration of pus or blood or both in the urine is noted. This, however, not infrequently occurs in showers and an examination in doubtful cases should be made several times if surgery does not seem urgent. Leucocytosis in acute pyelitis averaged 26,280 polymorphs, or about 8,200 higher in the average than acute appendicitis. That the two can coexist is well known for in the former list is included a recent case of gangrenous appendicitis accompanying an acute right sided pyelitis with the urine loaded with pus and blood.

The surgical correction of retroversion of the uterus, so common in multiparas, was found to relieve lower abdominal pain, almost always accompanied by chronic backache, in sixty-eight cases. The pain in these cases was described as being of a bearing down nature, aching, or sense of weight in the lower abdomen or pelvis, and usually was exaggerated after the patient had been upon her feet for several hours.

Uterine tumors, the majority of which were fibromyomata, were accompanied by lower belly pain. This was seldom of an acute nature but like the uterine retroversions, was more of a bearing down and aching sensation. Tumor mass in the pelvis, continuous with the uterine body, and chronic abnormal uterine bleeding usually sufficed to make a diagnosis.

Salpingitis was found in 3.8 per cent. Of these 1.2 per cent were of the acute type. In either the acute or chronic form the pain was generally below the umbilicus and lower than McBurney's point, if on the right side. There seemed to be a slower onset with salpingitis, more continuous pain in the chronic form than in appendicitis and leucorrhoea was a very common attendant condition with it. Nausea and vomiting were uncommon in the cases of salpingitis here recorded. A ruptured pus tube gives rise to a rapidly developing peritonitis and it may be impossible to determine its etiology without surgery.

Pelvic or lower abdominal peritonitis, locally with abscess formation, and generally with free pus, was found in twenty-five cases and the direct etiology of these was obscure. Presumably they developed from tubo-ovarian disease.

Six cases of ectopic pregnancy were encountered. The majority of these patients complained of a stinging or burning pain in the acute forms in one side of the belly, one case having had low left side belly pain for seven months and at operation showed apparently an old resolving ectopic. Four were ruptured with evidence of

shock and extravasation of blood into the abdominal cavity, from the resulting hemorrhage.

Patients possessing thirty-nine simple inguinal hernias, five umbilical, seven ventral, all gave pain in the belly as one of the annoying symptoms accompanying their infirmities. The inguinal variety usually considered pain and dragging in the groin as more annoying than pain in the abdomen. Recently acquired hernias were most painful and often accompanied by nausea and vomiting. This was also true often after reduction of the rupture which was accomplished with difficulty. Ten strangulated hernias had violent belly pain, generally of maximum severity over the area involved, with repeated vomiting as the bowel obstruction or incarceration continued.

Twelve acute bowel obstructions were seen, including two intussusceptions and the griping generalized belly pain, with rigidity, fecal vomiting and shock, when accompanied by absence of flatus passage with an increasing abdominal tympany was sufficient to establish a diagnosis. There were eight deaths in this number. One lived after a resection of over six and one-half feet of small bowel.

To the gastric ulcer, with its hunger pain syndrome in the epigastrium, irregular periodocity extending often over years, with frequent nausea or vomiting, was attributed the upper abdominal pain in fifteen surgical cases. Eight additional gastric and three duodenal ulcers were operated for perforation. Here in either case in addition to the violently abrupt onset of paralyzing pain in the upper belly there was shock and a board-like rigidity of the entire anterior abdominal wall, and usually pressure in the epigastrium was excruciating, despite large doses of morphine as a pre-anaesthetic hypnotic.

Lower abdominal pain was relieved by the removal of twenty-one cysts of ovarian origin, three of which were of dermoid type; two with twisted pedicles in which instances the pain was very acute, persistent and accompanied by vomiting and shock. The others were adenomatous or multilocular. One milk colored mesenteric chylous cyst about the size of an orange was removed in a young adult who had complained of dull aching pain in the region of the umbilicus for about two years.

Eleven cases of demonstrable urinary tract calculi were seen that had belly pain. Usually this pain was severe and colic-like, radiating to the testes, penis, or inner sides of the thighs. Two bladder stones were removed in which cases the pain was essentially suprapubic and was accompanied by dysuria and occasional bloody urine.

Fourteen cases of dystocia were terminated by Cesarean section and are simply included here as surgical cases accompanied by abdominal pain. This is also true of eighteen incomplete abor-

tions and fourteen post-puerperal sepsis patients.

Tuberculous peritonitis with its slow onset and gradual course of ascites with vague pains within the abdomen usually generalized, was observed in three cases. These were all of the simple type with multiple tubercles and not of the fibrous hyperplastic variety with rolled nodular omentum.

Carcinoma involving abdominal or pelvic viscera was viewed at operation in thirty-nine cases. These presented pain of constant character, usually diffuse throughout the belly except in eight cases with pyloric obstruction in which the pain was essentially epigastric and often radiated under the shoulder blades.

To postoperative adhesions belly pain was attributed in nine cases. One additional case of adhesions was apparently directly attributable to a former crushing injury of the abdomen. These were relieved in less than 50 per cent by operative interference.

Six cases of procidentia were accompanied by dragging abdominal pain and backache which largely disappeared following surgical correction.

In one instance a mildly diseased appendix was removed, when soon after the patient developed a diffuse Schoenlein's disease, the predominating symptom of which was an acute right-sided belly pain. With the appearance of the eruption and the involvement of the joints, the abdominal symptoms disappeared. This type of pain is seen not infrequently in pneumonia, pleurisy, and in two cases here included of an empyema of the chest as well as two of acute pleural effusions.

A few more uncommon cases accompanied by abdominal pain include a cyst of the urachus, two cases of coccydinia, one hypernephroma, three tuberculous kidneys, one acute inguinal adenitis, one Bartholin abscess, five uterine polyps of large size, of which the pain was perhaps partly psychic, and one thrombosed varicocele.

Behan in his masterpiece on "Pain" discusses the peritoneum saying that "inflammation of the peritoneum causes pain when acute . . . and in the chronic form it is the result of traction, usually adhesions." He also mentions the majority of cases included in the foregoing analysis and explains them by stating that the subperitoneal layer is plentifully supplied with pain nerves and that the irritation of this structure either from inflammatory changes or traction gives rise to abdominal pain.

McKenzie believes that serous membranes were not the seat of pain production and bases his conclusions upon the facts:

1. "That the abdominal wall is very tender in certain visceral colics in which there is no inflammation of the peritoneum *per se* . . . as in gall stone colic."

2. "That the skin of the abdominal wall is not generally so sensitive in visceral lesions for it



can be pinched between the fingers without producing pain; but if the muscles are grasped between the thumb and fingers acute pain is felt."

3. "That direct stimulation of exposed pleura, pericardium or peritoneum does not produce pain . . . and therefore the pain sense must be within the musculature."

These facts seem to correspond with later investigations for it is now known that actual traction upon layers of peritoneum or mesentery produces acute and severe pain, as is also present in the toxic irritation in acute infective peritonitis.

Lennander believed that "all painful sensations within the abdominal cavity are transmitted only by means of the parietal peritoneum and its subserous layer, both of which are richly supplied with cerebro spinal nerves around the whole of the abdominal cavity, with the exception of a small area in front of the vertebral column lying below the crurae of the diaphragm and between the two chains of sympathetic nerves."

Here he found no cerebro spinal nerves but only nerves running more or less transversely between the two sympathetic chains. He found that within this area the patient does not respond to hard pressure with a finger or even an instrument and that stretching of the mesenteric attachments at this point is not painful.

So far complete uniformity does not exist as to the presence or absence of pain sensibility in the peritoneum, though the majority of observers are in accord with the deductions of Lennander.

A few observations between the pain due to inflammatory changes within the abdomen and to referred pain in the region embodied the facts that the tenderness of a referred pain is produced by slight stimulation of the skin and subcutaneous tissue and seems to be relieved by deep pressure, while the exact opposite is present if peritonitis be developing or if active abdominal visceral pathology is present. Also that in cases of peritonitis proper there is generally no referred pain . . . and this is given by Moullin as a good indication no other viscera are involved, for as soon as other viscera become involved hyperalgesia is present. It would seem also definitely shown that in peritonitis and acute pathology within the belly, the abdominal reflexes are not exaggerated, while in referred pain as from a lower lobe pneumonia they are almost invariably exaggerated.

Pathology about the pylorus is often accompanied by persistent pain under the right scapula. Robson has pointed out that when the cardiac end of the stomach is involved the pain is under the left scapula.

In purulent pelvic pathology bimanual uterine examination always seems to exaggerate pain, which is usually referred also to the back and upward toward the umbilicus.

In cases where the resistance of the patient has been lowered from any cause such as exhausting

fevers or anaemia, referred or reflected pains are more apt to occur, and the location of the viscus may be indicated by delimiting the area of hyperalgesia is nearly as possible on the belly wall, orientating it with a cord segment, determining what organs are supplied by this particular segment and then attempting to produce the pain in an exaggerated form by manual pressure of the suspected organ. In the face of obvious pathology this is of course not necessary and is merely suggested as being of assistance in doubtful cases. It is also well to remember, as Behan points out, that the majority of all acute belly pain, due to abdominal pathology, is present early in its onset in the epigastrium but as it continues it usually becomes of greatest intensity over or about the organ involved. This may also be said of the attendant rigidity of the belly walls.

There are many other conditions causing abdominal pain which are not unusual but which in this series were not recognized as such. Among these may be mentioned acute inflammations or new growths of the belly walls, mesenteric thrombosis, embolism, gastric crises in tabes dorsalis, acute indigestion, intercostal neuralgia, herpes abdominalis, acute pancreatitis, malaria (and this is especially true in the tropics), the onset of acute infectious systemic diseases, uraemia, diaphragmatic hernia and pleurisy of this structure, floating kidney, abdominal aneurysm, arteriosclerosis, lead colic and other mineral poisonings, spinal cord pathology as in acute myelitis, perforation of a viscus, traumatic or infectious as in typhoid, vegetable intoxications, and lastly but not least, chronic constipation with local grade fecal impaction.

In this total recorded it may be roughly estimated that about 46 per cent of the patients complaining of pain within the abdomen who had reported for surgical relief had their pathology within the appendix or gall bladder, or both, and of these the appendix disease predominated in the ratio of three to one.

The general history of a patient as well as a careful consideration of the onset and course of any abdominal pain with its almost constant accompanying signs is and should always be of prime importance to aid in the final judgment of the examining physician in localizing the seat of disease, and never placed in abeyance to mechanical means in laboratory procedures which at best are only adjuncts, and the observation of such a creed is always rewarded by a better enlightenment to the seeker after truth.

## SPECIAL ARTICLE

*News Notes From Indiana University School of Medicine*

The degree of Doctor of Medicine was granted by Indiana University to eighty-six members of the senior class of the Indiana University School of Medicine in Indianapolis at the annual commencement exercises held at Bloomington, June 6. Two members of the class were women. The great majority of the class had already announced acceptance of interne appointments, where they will gain a year or more of hospital experience before entering private practice. Six received commissions in the medical corps of the army or navy immediately after receiving their medical degrees, and are being assigned to various base hospitals for their preliminary training. Four announced their intention of engaging in private practice immediately. Seven announced their intention of serving internships, but had not yet made a choice of hospitals at graduation time. Opportunities offered the graduates in the way of internships in approved hospitals were said to be greatly in excess of the number available to fill them.

The complete list of graduates, their home towns and their internships or other plans for the coming year follow:

In the Indiana University Hospitals, the Robert W. Long, James Whitcomb Riley Hospital for Children, and William H. Coleman Hospital for Women—Harvey M. Anthony, Muncie; Marion H. Bedwell, Dugger; Raymond R. Calvert, Lafayette; Herman W. Kuntz, Indianapolis; Jesse Robert Logan, Petersburg; James F. Maurer, Brazil, and Charles L. Richardson, Rochester.

In the Indianapolis City Hospital—James N. Bartle, Bloomington; Norman M. Beatty, Indianapolis; William T. Bennie, Lyons; Albert M. DeArmond, Redkey; Russell A. DeMotte, Odon; Walter S. Fisher, Lafontaine; Clifton G. Follis, Adolphus, Ky.; Roy A. Geidor, Indianapolis; Edgar J. Hunt, Terre Haute; Paul G. Iske, Indianapolis; Ferris V. Langston, Windfall; Paul R. Leathers, Indianapolis; Sam W. Litzenberger, Middletown; John P. Lordan, Michigan City; Ernest K. McLain, Indianapolis; Howard A. Miller, South Bend; Leonard L. Nesbit, Princeton; Frank B. Ramsey, Bloomington; Alfred R. Robbins, Rochester; Byron K. Rust, Indianapolis; Thomas J. Walsh, Bedford; Paul R. Weeks, Terre Haute; Paul D. Williams, Martinsville; Eugene E. Willison, Dale; Ethelbert R. Wilson, Indianapolis, and W. S. Zarick, Bloomington.

In the Methodist Hospital, Indianapolis—Winfred Joel Fuson, Amo; Russell E. Havens, Cicero; William E. King, Bloomington, and William A. Miller, Linden.

In St. Vincent's Hospital, Indianapolis—Paul G. Hill, Noblesville; Ralph R. Kahre, Edwards-

port; Homer L. Warrick, Bloomington, and Max J. Wollenman, Ferdinand.

In the Indiana Christian Hospital, Indianapolis—Claude M. Donahue, Birdseye.

In other Indiana hospitals outside of Indianapolis—Joseph C. Dusard, Indianapolis; Harry E. Klepinger, Lafayette, and William R. Ward, Michigan City, in St. Elizabeth's Hospital, Lafayette. Raymond J. Liehr, Terre Haute; Paul C. Furgason, Cambridge City, and Walter Yovaish, Rockford, Ill., in St. Margaret's Hospital, Hammond. Harold F. Grover, Francesville, Mercy Hospital, Gary.

In hospitals outside Indiana—Perry W. Bailey, Indianapolis, and Herman A. Corliss, LaGrange, Ill., Cincinnati General Hospital, Cincinnati, O. Rue O. Basham, Richardsville, Ky., Wesley Hospital, Wichita, Kans. Prosper G. Bernard, Decatur, Mich., and Rex K. Pomeroy, Schoolcraft, Mich., Butterworth Hospital, Grand Rapids, Mich. Charles Berns, Cleveland, O., Charity Hospital, Cleveland, O. James W. Calvert, Morgantown, W. Va., and Harry G. Conn, Toledo, O., Lucas County Hospital, Toledo, O. Charles Davis, Grove Hill, Ala., Tennessee Coal and Iron Railroad Hospital, Birmingham, Ala. Gordon A. Dickinson, Bloomington, Wesley Memorial Hospital, Atlanta, Ga. William H. Grishaw, Tipton, Lane and Stanford University Hospital, San Francisco, Cal. George R. Jewett, Wabash, and Charles E. Stouder, Huntington, Seaside Hospital, Long Beach, Cal. Forrest E. Kirshman, Waveland, and Floyd E. Wolfe, Indianapolis, Ancker Hospital, St. Paul, Minn. Pauline Pegg, Indianapolis, St. John's Hospital, Tulsa, Okla. Samuel R. Permut, Cleveland, O., Mt. Sinai Hospital, Cleveland, O. Lester H. Quinn, Flora, University of Wisconsin Hospital, Madison, Wis. Lawrence M. Robrock, Michigan City, Van Couver General Hospital, Van Couver, B. C. Bertha Rose, Martinsville, Children's Hospital, San Francisco, Cal.

In the United States Navy Medical Corps as commissioned officers—Marion J. Eaton, Indianapolis; Robert C. Luckey, Wolf Lake; DeCoy Marchand, Larwill; Otto W. Wickstrom, Indianapolis, and Jesse G. Wright, Valparaiso.

Commissioned officer in the United States Army Medical Corps stationed at Letterman General Hospital, the Presidio, San Francisco, Cal., Charles McCabe Downs, Danville, Ill.

These will enter at once upon general practice of medicine: Walter C. Bond, Coal City; Carl M. Clark, Oakland City; Arnold H. Duemling, Fort Wayne, and John W. Graves, Corydon.

Those who have not yet announced their choice of a hospital internship are: Edwin H. Andrews, Muncie; Max Karan, Brooklyn, N. Y.; Fred A. Kennedy, Valparaiso; Scobie Richard Linthecome, Indianapolis; Chapman S. Moorman, Portsmouth, Va.; Charles E. Smith, Evansville, and Henry G. Steinmetz, Logansport.



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 ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.  
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**EDITORIALS**

**THE DANGERS OF EPINEPHRIN**

The use of epinephrin (adrenalin) is so general that it would seem unnecessary to utter a word of caution concerning dangers or even the fatal effects that may occur from the use of the drug in certain cases. Epinephrin is known to be a cardiac stimulant and vasoconstrictor. Therapeutically it is used by injection in the treatment of asthma, urticaria and serum sickness, and locally for capillary hemorrhage, or to insure a bloodless operative field. While it does not possess any local anesthetic action it increases very markedly the effect of certain anesthetics when combined with them. Thus, it is quite customary to employ epinephrin in connection with cocaine, butyn, and some other local anesthetics for surface use, and to combine it with procaine solutions for injection to produce nerve blocking or infiltration anesthesia. In the main there has been a tendency to use epinephrin too freely, and in too large quantities without regard to possible toxic effects. It is known that many patients show a rather decided idiosyncrasy to the drug, especially young children, old people, and those with possible heart disease, and even when administered in proper doses there may be such manifestations as blanching of the face, tremor, and increased heart action perceptible to the patient. Overdoses of epinephrin kill by cardiac dilatation, with pulmonary edema. The tendency to this result increases with cardiac weakness. Patients suffering from cardiac insufficiency invariably show distinct cardiac dilatation with normal doses of epinephrin. The local application or hypodermic injection of epinephrin in ordinary doses does not normally produce any symptoms. Not infrequently, however, excitable or susceptible patients, and especially those with advanced Basedow's disease, respond in a few minutes by tremors, anxiety, nervousness, palpitation, precordial distress, increase in the rate of pulse and respiration, rise of blood pressure and temperature, and sometimes death by acute dilatation of the heart. With intravenous injections there is very great danger of acutely fatal dilatation of the heart. The adrenalin test for hyperthyroid patients, introduced by Goetsch, has demonstrated very clearly, as pointed out in Bartlett's latest book on the *Surgical Treatment of Goiter*, that it is highly dangerous and no

longer allowable to employ the time-honored four drops of adrenalin to the ounce of one-half per cent novocaine as a local anesthetic in thyroid cases, and yet a surprising number of surgeons are not taking this fact into consideration, and a still larger number of special surgeons, like the ophthalmologists, the otolaryngologists, and the proctologists continue to use epinephrin in their anesthesia solution in spite of the fact that many of their patients are thyroid patients and hence peculiarly susceptible to the dangerous effects of epinephrin administration. A precaution to be observed is the dosage in any case, the total amount always being on the side of safety, and the best possible care to avoid administering epinephrin to those thyroid cases in which epinephrin administration is dangerous. There also should be some hesitation in using the drug in old people and those with any form of heart disease, particularly cardiac insufficiency.

**CONCERNING MEDICAL PUBLICITY**

At the Washington session of the A. M. A. the question of medical publicity came before the House of Delegates for discussion. In his address before the House, president Wendell C. Phillips said, "The medical profession should throw off its mask of reticence and its shrinking attitude toward reasonable publicity concerning health education. Professional policies narrowly conceived can never successfully oppose the rightful interests of the public. It is time to strike the shackles not only from the shrinking attitude of the medical profession toward the public espousal of educational programs, but also from its attitude toward the lay press, the radio, and great assemblies of truth-seeking people. The physician has no right to conceal from non-medical readers the great body of news of the highest importance which is his to communicate."

We quite agree with what Doctor Phillips has to say on this question, but we wish to point out that there is a right and a wrong way of educating the public concerning individual and community health. We are getting sick and tired of having some of our prominent medical men, and others who are not so prominent, advertise and exploit themselves as a direct result of this prevalent idea that the medical profession should pay more attention to the subject of health education. We have witnessed the most flagrant abuse of all the rules of decency and ethics in the medical profession through the appearance in some of the leading lay magazines or newspapers of articles on some phase of health under the name of some very prominent member of the medical profession, but patently advertising and exploiting the writer either because of the wording of the article or the preface and legends accompanying the same. The *Delineator* carried such an article in its issue of October, 1926, and

some of the New York newspapers, notably the *Tribune*, have had similar articles. At the Washington session of the A. M. A. Professor Noguchi presented an address before the Section on Ophthalmology in which he gave to the profession his discoveries in connection with the cause of trachoma. On the following day a prominent ophthalmologist of Philadelphia seized upon the occasion to exploit and advertise himself by being interviewed concerning the subject of trachoma and what has been done by himself and others to increase our knowledge concerning it and the interview was published in the *Philadelphia Public Ledger*.

The public *does* need education concerning health problems, but it should receive that education in a way that does not cause criticism or offense, and the information given out should be of a thoroughly trustworthy nature. It is quite true that some individual members of our medical profession can speak authoritatively upon certain medical subjects, but there are a great many others who presume to pass opinions that not always are acceptable to the profession as a whole, and it is the consensus of opinion that should prevail. We have maintained and we shall continue to maintain that an article on medical topics intended for lay reading will carry more weight when it is issued under the authority of the American Medical Association or one of its constituent societies than it will when issued under the authority of an individual member of our profession. It is with this idea in view that the editor of *THE JOURNAL*, introduced at the Washington session of the Association a resolution concerning this matter which was adopted unanimously by the House of Delegates. We feel that the acceptance of the spirit of this resolution does not in any sense curb all reasonable publicity concerning health education. We would even go so far as to approve the appearance of an individual physician's name to any medical article for the lay press providing the article has been approved by and published under the authority of a representative committee of the American Medical Association or any of its constituent societies, well knowing that the approval of no article of an advertising or exploiting character can be obtained, and that the sickening self-exploitation seen in so many of the articles by prominent men will be prevented.

Judging from the many expressions of opinion heard at the Washington session the action of the House of Delegates in an endeavor to suppress self-exploitation of prominent medical men under the guise of furnishing much needed education of the public concerning health, is very greatly appreciated. Furthermore, calling attention to the matter will help to stiffen the backbones of some medical organizations that should employ the existing machinery for disciplining and penalizing those men of our profession, prominent

though they may be, when guilty of offenses that are in bad taste if not entirely unethical, and certainly offensive to their confreres.

#### THE GOVERNOR AND ATTORNEY GENERAL SECURE WHISKY

Well, well! So the governor as well as the attorney-general of Indiana are lawbreakers. Both procured whisky to be used as a medicine for members of their families who were desperately ill. Such conduct is prohibited by law and is punishable by fine or imprisonment. Indiana's "bone dry law" absolutely prohibits a physician from either prescribing or giving any alcoholic beverages, no matter how small the quantity nor how urgent the need for such a remedy to save life. The question is, what will Rev. Shoemaker and all other prohibition fanatics do about this flagrant violation of Indiana's laws? The attorney-general has written an open letter to the governor calling upon that official to petition the next Indiana legislature to amend the state prohibition law to conform to the federal law governing the matter, so that alcoholic beverages may be obtained by physicians and prescribed by them for illness under appropriate restrictions.

It doesn't make any difference whether there is a disagreement among medical men as to the therapeutic value of whisky, the fact remains, as pointed out in the resolution passed by the House of Delegates of the A. M. A. at the Washington session, that no lay persons or body of lay persons should dictate to members of the medical profession as to what remedies shall be prescribed as therapeutic agents in the treatment of disease, or in what quantity they shall be prescribed. The principle involved in this discussion is unquestioned by intelligent and rational-minded people. If Congress or a state legislature can dictate as to the amount of alcoholic beverages that a physician may prescribe as a therapeutic agent, then it is but a step farther to dictate as to how much strychnine, digitalis, quinine, or any other therapeutic agent may be used.

The absurdity of this temperance edict, insofar as the practice of medicine is concerned, has been patent to many of us ever since the passage of the prohibition law, and especially the Indiana "bone dry law" which latter absolutely prevents a physician from prescribing, owning, or dispensing even a teaspoonful of alcoholic beverage. The law does not represent the sentiment of even a fair majority of the people of Indiana, or the United States, and it got on our statute books as a result of political jugglery and the influence of a lot of erratic and fanatical temperance people who are willing to go to any length to accomplish their purposes. Perhaps, after all, it is fortunate that episodes like that occurring in families of the attorney-general, and the governor of Indiana, have emphasized the ridiculousness of the position we occupy. Let us hope that



there will be some modification of the prohibition law, at least to the extent of eliminating the inconsistent and unfair dictations to the medical profession as to the prescribing of alcoholic beverages as therapeutic agents.

#### LICENSING INCOMPETENCY

We sometimes wonder if it pays to make any effort to protect the public from incompetency in the treatment of human ills and deformities. Certainly we must admit that we have not gained much by legislation, except to make it more difficult for educated and well-trained medical men to secure legal recognition while at the same time the medical pretenders and representatives of several drugless schools of the healing art have managed to secure legal recognition in several states, and meet with little or no opposition in other states that as yet have not legally recognized them. It is a sad commentary upon the consistency of reasoning on the part of the public when men with little or no education and training as pertains to the human body in either health or disease are permitted to practice medicine and surgery without let or hindrance. We always have maintained that the fault lies with the regular medical profession in not pointing out to the public the dangers of such an attitude. In the commercial world we place a premium upon education, training and experience, and in consequence the incompetents in the commercial world receive little consideration. In the practice of medicine a standard of fitness does not seem to be recognized as necessary and a very large class of people fail to analyze the subject on its merits and act according to consistent and intelligent conclusions. It will require a large amount of education of the public to change the present trend of opinion, for we must admit that the poorly educated and untrained practitioners of every kind have been increasing in numbers, and there has been a steady increase in the amount and kind of legal recognition given them. As we often have stated before, one of the features of this discussion that seems to have received scant attention is the damage done to the public, and particularly the ignorant and the poor, by permitting these pseudo doctors to practice upon the sick and suffering. In a very large measure the condition of affairs that confronts us today is due to the apathy and indifference of the medical profession. If education, training and experience count for anything in any line of work it must count for a great deal in the recognition and treatment of disease and faulty conditions of the human body. Some legislators and well-meaning persons very inconsistently have argued that the osteopaths, chiropractors, naturopaths and others of similar kind, who know little or nothing of disease conditions of the human body, cannot do harm for they only rub or massage and do not attempt to practice medicine in all that goes to make up the

regular physician. From the very first we have maintained that these pseudo-medical cults are aiming to get into the medical profession through the back door, or perhaps we should say aiming to secure legal recognition for full rights and privileges of physicians without going through the usual requirements. A few years ago the osteopaths asked the Indiana legislature for legal recognition for the practicing of osteopathy or drugless healing, and at that time they made the claim that they did not desire nor would they pretend to perform surgical operations, take care of women in childbirth, or prescribe or dispense drugs. They secured the desired recognition, only to come back later with the demand that they be licensed to do the very things that they claimed they did not want to do, and for which they and everyone else know they are not adequately trained. Through clever manipulation and political jugglery they secured an amendment to the law, and now are permitted to attempt to do anything that any regular practitioner of medicine can do. We know and they know that they are not educated or trained to do surgery, obstetrics, nor prescribe drugs intelligently, and yet legally they are on the same par with all of the better educated and better trained medical men of the state. What has occurred in Indiana has occurred in other states, and concerning this matter we quote from the *Journal of the A. M. A.* of April 30, 1927, as follows:

Years ago, osteopaths claimed that as they did not use drugs or perform surgical operations they were "not physicians" and were "not practicing medicine," and therefore were not subject to the laws and higher qualifications required of physicians. They have now radically reversed their position and are demanding equal privileges with physicians, but apparently are still unable or unwilling to meet the higher standards of educational and professional training. As a result of such claims, osteopaths are now being licensed as physicians by the medical boards of Colorado, Massachusetts and Texas. This was true also in California until three years ago when, fretting under the restrictions of the medical board, the osteopaths secured an amendment to the California medical practice act, creating a separate board of osteopaths to license them as physicians under a less rigid routine than that applying to graduates of medical schools. While the amendment gives the osteopaths equal privileges with physicians, it does not guarantee equally expert knowledge or training. To make them equal in both respects does not require separate boards or varying standards of qualifications. As a matter of fact, no osteopathic college has entrance requirements equal to those of medical schools, no osteopathic college has equally expert teachers, and no osteopathic college provides equally efficient instruction in the differential diagnosis of diseases or in the many valuable methods of treating sick and injured people. Nevertheless, last year, eighty-eight osteopaths were licensed in the four states named and given the same privileges as physicians.

We wish that we could be more optimistic concerning the outcome of all of the efforts to destroy the educational standards which now apply to the practice of medicine, but we really can find little comfort in the knowledge that several states, our

own included, actually have legalized incompetency and placed it on a par with the competency that goes with graduation from a Class A medical school. We also agree with the *Journal of the A. M. A.* when it says that the final solution of problems related to the practice of medicine depends upon the education of the public. When there is a general knowledge of the danger from illegal and incompetent practitioners, public opinion may favor better laws and the appointment of competent boards to enforce them. Up to the present time we have put forth but feeble efforts to change public opinion.

#### DR. KING SHOULD BE RETAINED

We know that many prominent medical men in Indiana are making an effort to have Dr. William F. King removed from office as secretary of the Indiana State Board of Health. We can understand the reason for this belligerent attitude, for Dr. King has lost much of the friendship and esteem of the rank and file of the medical profession of Indiana through his disregard of the opinions of the profession as concerns policies of his board in which the members of the medical profession are interested. He also has sanctioned and put into effect some socialistic and state medicine ideas that are repugnant to physicians, and in the long run highly detrimental to the public. Dr. King claims that he carries out the wishes of the board, but we learn on reliable authority that it is Dr. King who proposes and the Board disposes, and that most of the policies of the Board are King policies and not Board policies.

We are opposed to the effort to throw Dr. King out of office, and for the reason that it is not a square deal and does not give Dr. King an opportunity to change his tactics and prove that he is worthy of the trust that has been placed in him. He was taken into the State Board of Health a good many years ago and had his training under the late Dr. J. N. Hurty, who was recognized as one of the best and most efficient state health officers in the United States. Dr. King was considered to be worthy of appointment as the successor to Dr. Hurty, and he has continued in office ever since. That he is capable and can be efficient is acknowledged. In fact, he is too efficient in catering to the uplift and welfare organizations, and in almost totally ignoring the medical profession which latter is interested vitally in the policies of the State Board of Health. To summarily dismiss him from office means that he would leave his present position with some disgrace, which he does not deserve without first offering him a chance to make good. He has been too long out of private practice to make that a "go" again, and, all in all we think that it is a piece of rank injustice to dismiss him at this particular time. However, Dr. King ought to be given to understand that he will have to sponsor

and carry out policies that are in keeping with the high ideals of the medical profession and the best interests of the public, that he must divorce himself from socialistic and state medicine ideas, and that when he deviates from that plan he will incur the displeasure of the medical profession of the state and bring about an emphatic request from medical men for his removal from office.

On numerous occasions we have privately, and less forcefully in *THE JOURNAL*, told Dr. King that he was making a mistake in not taking the medical profession more into his confidence concerning the policies of the State Board of Health, but he has turned a deaf ear, and now he is reaping the harvest for his lack of judgment. We are aware of the fact that many prominent members of the medical profession are saying that Dr. King should have been advocating and following right policies in the first place, but to that we may answer that he instinctively is right at heart, but like many others holding public office, he has courted influence that he thought would keep him in office. He now knows that he has been going down a blind alley and that he must take another road. Let's see how well he travels the new road!

#### THE MEDICAL PROFESSION ACTS

The medical fraternity of the United States, represented by the American Medical Association, will ask Congress to amend the Volstead act by "providing such regulations as will permit doctors to prescribe whatever amounts of alcoholic liquors may be needed for their respective patients." The Association declares its adherence to the principle that legislative bodies composed of laymen should not enact restrictive laws regulating the administration of any therapeutic agent by physicians legally qualified to practice medicine.

The Anti-saloon league will combat this declaration of medical independence. The league will object to the proposed amendment of the Volstead act on the ground that unscrupulous doctors would sell whisky prescriptions.

When the medical fraternity of the United States is forced to protest against a law that interferes with the saving of human life, the question may well be asked whether the United States is not in the Dark Ages instead of the twentieth century.

A doctor has free access to poisons. On the Wayne B. Wheeler theory he should be denied this freedom, for fear that he might conspire with a murderer to "bump off" a rich patient and share the estate with the assassin. If Wayne B. Wheeler is right, the dispensation of poisons should be controlled, so that doctors may not become accomplices of murderers.

Cases have been known where infants have been palmed off as their own by scheming ladies who were bent upon obtaining large fortunes from highly embarrassed millionaires. Apparently the



law is grossly negligent in not shielding doctors from the temptations that might be thrown in their way by the aforesaid ladies. If a doctor would break the law for the sake of gaining \$2 on a whisky prescription, what wouldn't he do if tempted by a slice of blackmail? Wayne B. Wheeler and the Anti-saloon league should look to this.

Are the doctors of the United States dependable and law-abiding? The law seems to think so when it admits them to practice after they have met educational and moral requirements. They are generally regarded by the public as men of exceptionally high character, scrupulously conscientious and devoted to duty. The life of the people is freely placed in their hands. But the Anti-saloon league would disparage the entire medical profession, deny its integrity, and overrule its judgment in the treatment of the sick.

The distortion of the law which prohibits traffic in alcoholic beverages into a means of preventing the use of alcoholic medicines is an astounding misuse of legislative power. The medical profession is in duty bound to attack this law and force its rectification. The people will stand behind the medical profession in this fight. There should be no cessation of the agitation for the amendment of the Volstead act until the crazy provision against liquor as medicine has been repealed.—*Washington Post*, May 20, 1927.

#### PROTEIN DIET AND NEPHRITIS

There seems to be a very widespread feeling among physicians that diets containing protein are harmful to patients with both high blood pressure and nephritis. Again and again the writer has seen patients who have been told that as they have one or the other or both of these conditions they should live on a diet containing no eggs or meat. This diet is not harmful and the prohibition of all animal protein is unnecessary.

I have not been able to trace this idea under criticism to its source but there are certain experimental reports which apparently confirmed it. Newburgh and Marsh, for example, published the results of high protein feeding in rabbits. They said that they found nephritis with cellular elements and casts in the urine. When one became acquainted with the methods they employed in their work it was evident that their results were open to criticism, and not long after several workers, both in this country and in England, failed absolutely to confirm their results.

There was apparently a preconceived idea that proteins were harmful and the negative results fell upon prejudiced minds. This is all the more remarkable because of the fact that there is one huge natural experiment which has been going on for generations among the Esquimaux. Their diet is meat and fat. That is all. There is no record of an increased incidence of nephritis

among them. Then the explorer, Stefansson, lived for a year upon the meat and fat diet, and in spite of hardships during this time he was found some months later to be free from all evidences of hypertension or of nephritis.

Recently another champion has entered the lists in favor of the view that not only is a diet high in protein not harmful to the kidney of the particular experimental animal, but that a pure amino-acid, cystine, said by some to cause nephritis, does not produce nephritis.

Addis, MacKay and MacKay\* have approached this question after a very careful study of the literature. They call attention to many errors in previous experiments, the chief of which is that the diet fed to the white rat must be one which of itself is adequate for nutrition and normal growth and which is changed only in the addition of one element. The controls must be carefully watched. When all conditions have been fulfilled then conclusions will have some value.

They fed their rats for a period of a year which in the rat's life is the equivalent of 30 years of a man's life. The control diet contained 17.3 per cent protein, the experimental diet contained 69.5 per cent protein. On this latter diet the rats grew but were not quite as heavy as the controls. No evidence was found in the urine of kidney injury throughout the experiment and the kidneys, postmortem, were slightly enlarged over those of the controls, but were in no way damaged. The lessened weight of the rats was found to be due to the lessened amount of abdominal fat.

The experiments confirm the findings of others in the same work. They cannot explain the positive findings of some authors. The reading of this article carried more conviction than any article on this question which the writer has read. The weight of evidence is certainly upon the side of those who deny the harmfulness of protein to the kidney and confirms much clinical observation upon the harmlessness of a reasonable amount of protein in the diet of the nephritic. As a matter of fact there is one malady characterized by enormous amounts of albumin in the urine where a diet rich in protein is absolutely essential in order to prevent depletion of the body proteins. This is lipoid nephrosis, a rather rare disease, but as an addition to glomerular nephritis quite common.

Old ideas have a peculiar tenacity which is only broken down by constant repetition of the new facts. Such a careful piece of research as this by Addis and his co-workers should help materially to shatter ancient belief in the danger of feeding proteins to nephritics.—*Wisc. Med. Jour.*, May, 1927.

#### THE REACTION

Frankly I am tired of health rules—even though I am one of those trying to teach folks how to care for themselves so that they may live

\**Jour. Biol. Chem.*, 71:139, 1926 (Dec.).

long, and happily and well. Undoubtedly there is nothing so valuable as good health, and so we must use every possible means within reason to attain this ideal state of well being and efficiency, this freedom from pain and distress.

But there are other things in life that must be done, and possibly it is not necessary to observe to the dot every one of the myriad of rules prescribed by authorities, near-authorities, and would-be authorities. Indeed I have noted, I think, that the bigger the authority the fewer rules he has set out, while some smaller wights have been as full of them as the proverbial dog is of fleas—and the comparison is not altogether inapt.

If the workers of the world would bathe every day, brush their teeth after each meal, wash their hair, manicure their nails, do their daily dozen, chew their food leisurely, relax after meals, wash the hands a dozen times a day, give all the attention to their clothing, shoes, bed, living rooms, supervise their eating and living, and carefully observe the innumerable health rules recommended by certain health faddists, when would they have a good time, and when, Oh when, would they get the world's work done? Life should be more than a health chore.

It takes courage for a teacher of health to attack these dogmas, but there is real need that it be done.

Regarding food fads one might write a book. The need of a "balanced ration," of the proper number of calories, the importance of eating at a given meal only foods that have the same digestion time, Fletcherism, vegetarianism, the taking of so many drops of cod liver oil whether you need it or not, sour milk diets, the eating of large quantities of yeast *et alii ad nauseum*!

Some seem to think that the food of the family needs to be weighed out on delicate balances, and its fuel value carefully computed—as if normal folk did not have natural appetites to guide their eating. We wonder, we wonder how the race managed to muddle through in the days before dietetics.

In my humble judgment but one rule for eating is needed, and that is that we should have an abundance of simple food with emphasis upon milk, fruits and vegetables. For heaven's sake let's leave a place for natural desire or appetite, and let's not make the dinner table a prescription counter.—T. B. Rice, M.D., in *Baking Technology*, January, 1927.

THE fact that Montreal has an epidemic of typhoid fever and tourists are advised to stay away from there will have no appreciable effect in keeping thirsty Americans from seeking such a pleasant oasis as Montreal for a summer vacation. Typhoid vaccination ought to be popular among the people who intend to visit Canada this summer.

## EDITORIAL NOTES

### DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital. We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

HAVE you picked out your vacation spot? If not, why not?

THE 1928 session of the American Medical Association will be held in Minneapolis. Splendid accommodations have been guaranteed in advance for all of the activities of the Association.

A PROMINENT editor in the east is authority for the statement that a certain newspaper received hundreds of inquiries from women wishing to buy tapeworms in order to reduce their weight. Why not ask for hookworms to quiet restless babies?

LACK of space prevented us from giving a complete resumé of all of the proceedings of the Washington session of the American Medical Association, but we shall publish a comprehensive article on the subject in the July number of THE JOURNAL.

WELL, well! Some of the pamphlets discussing the Abrams method of diagnosis and treatment are now sold at so much per copy. Why charge for it now, when its popularity is waning? A better scheme would be to pay people to read the crazy stuff.

THE Tennessee evolution fight seemed to be utterly ridiculous, and yet it has served an educational purpose as evidenced by the sale of more books on evolution last year than in the twenty-five preceding years. Controversy always is a good thing because it leads to study.

WITH the exception of electing a new president, Dr. W. S. Thayer, of Baltimore, and a new vice-president, Dr. Charles A. Elliott, of Chicago, the old officers of the American Medical Association were re-elected. Indiana was favored by the re-appointment of Dr. Frank W. Cregor as a member of the Judicial Council.

THE diagnostic clinics at the Washington session of the A. M. A. were well attended and proved to be an interesting and valuable feature



of the session. They should be a part of the program for every medical association session of the prominent medical societies, not omitting our State Medical Association.

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THE federal prohibition officers, aided and abetted by members of the Anti-Saloon League, are dealing out drastic punishment to many minor offenders of Indiana's prohibition law. What are they going to do with the governor and the attorney-general who openly admit obtaining and using alcoholic beverages? Certainly the law should be no respecter of persons.

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THE radio is being commercialized and now the radio programs consist of music, interspersed with advertising talks by auto salesmen, soap manufacturers, patent medicine venders, chiropractors, and quite recently talks by some regular physicians. We hope that the talks by the latter may offset some of the damage done by the quacks and medical pretenders who likewise have the privilege of contributing to radio programs.

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PRESIDENT COOLIDGE delivered an excellent address at the opening session of the American Medical Association. He seemed very careful not to offend any of the pseudo-medical cults, though he did say that to the regular medical profession would fall the duty of bringing out and developing all that is best in the improvement of individual and community health. He didn't say that anything could be expected from the pseudo-medical cults.

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INDIANA doctors are hereby warned to look out for a "dope fiend" who calls upon doctors and presents a letter, presumably from a doctor in the South, recommending that morphine to the amount of twenty grains be prescribed for the patient's own use for the relief of amebic dysentery. No matter what kind of a story the man tells, or what the temptation may be to comply with his request, doctors should order him out of their offices.

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IN an address delivered before the University Club, of Baltimore, Dr. Charles H. Mayo emphasized a growing opinion in this country that our educational system is bad in that not enough attention is devoted to the selection of teachers and the schools are idle too many months in a year. He said that the schools should remain open all the year around, and classes should be reduced in size, with care to prevent the backward intelligence from retarding the work of the advanced.

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A STATISTICAL study by the Metropolitan Life Insurance Company shows that there has been a steady rise in deaths from alcoholism among the American wage earners since prohibition. The report claims that this increase has been very

general and is not confined to a few states as generally claimed by the prohibitionists." On the other hand, the same report states that for the same period of time, the alcoholism death rate in Canada has been very much lower than in this country.

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COMPULSORY surgical sterilization of insane, feeble-minded and epileptics has been approved by the supreme court of the United States in upholding the Virginia sterilization law of 1924. The opinion of the court is based upon the idea that sterilization may be required for protection of the public welfare. This decision should pave the way for further sterilization legislation throughout the states of the Union. There is neither a humane nor a logical reason why the hopelessly unfit should be permitted to reproduce themselves.

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THE *Ohio State Medical Journal* says that a California physician has been called up before a court by one of the numerous separate licensing boards of that state to answer to a charge of practicing chiropractic without having a license. It seems that in California a license to practice medicine grants the holder the right to use any and all therapeutic methods, but since chiropractic is not a therapeutic method, practitioners must be licensed before attempting to use it. "A voice from the gallery suggests that he should have been pinched for not knowing better."

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DR. WILLIAM SIDNEY THAYER, of Baltimore, was elected president of the American Medical Association at the Washington session last month. Dr. Thayer is an internist of wide reputation and experience. He was a brigadier-general in the medical corps of the army in the World War, physician-in-chief for Johns Hopkins Hospital in Baltimore from 1918 to 1921; has been decorated by this government and several foreign governments, and is well known as an author and lecturer on medical topics. He is now emeritus professor of medicine in Johns Hopkins University.

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THE State Board of Health has had its squabbles and right now its usefulness is handicapped by internal dissension. Incidentally, the organized medical profession of Indiana has no reason to be very proud of the Indiana State Board of Health in view of the fact that the Board has been guilty of some policies that are tinctured with state medicine ideas. It would be well for the medical profession of the state to take some notice of the activities of the Board and attempt to change the policies of the Board so that they will conform to the ethics and ideals of reputable professional practice.

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THE commissioner of health for New York state says that the State Department of Health

is supervising two thousand children crippled from poliomyelitis, many of whom are still helpless because they were improperly treated by chiropractors during the early stages when improvement might have been effected. Chiropractors acknowledge that they practice medicine and treat contagious diseases, although they know little about them and say that they have no need to study them. Yet failure to recognize them and treat them properly is not only harmful to the patient but is also a public menace. Some day the people may appreciate this fact.

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WE are advised that a representative of a collecting agency having offices outside of Indiana is calling upon Indiana doctors and making the statement that the editor of *THE JOURNAL* has excepted his company in the general condemnation of collecting agencies. Nothing could be further from the truth. There may be an occasional honest and trustworthy collection agency, but doctors as a class have been defrauded so generally by collecting agencies that we feel justified in warning the unwary. The doctor who is wise will steer clear of collecting agencies, and particularly those having offices outside of his immediate vicinity. Furthermore, why patronize a collection agency anyway?

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PHYSICAL therapy is being greatly commercialized. It is used without rhyme or reason. How fortunate it is that the A. M. A. has a council on physical therapy that is beginning to function. What we need now is to shut down upon the manufacturers who are misrepresenting physical therapy apparatus of every kind and leading a lot of gullible physicians to believe that physical therapy will do almost the impossible. All of the various modalities, including ultraviolet light, infra-red light, diathermy, and x-ray are beneficial in the treatment of certain conditions, but they are not a cure-all, and it is time that doctors learned to use them intelligently.

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A YOUNG graduate of the Indiana University School of Medicine has come to us with a complaint that he and others recently from medical schools are obliged to enter into the worst form of commercial competition with some of the older practitioners in medicine or starve to death. He says that not only do some of the older men lower their fees when a recent medical graduate comes into the community, but they actually make personal bids for patronage from any and all patients who show the slightest tendency to patronize a newcomer. Fine teamwork. However, we will bet our money on the young graduate who is ethical and renders conscientious service.

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CAPTAIN NUNGESSER, who recently failed in his attempt to fly from Paris to New York without a stop, was wounded seventeen times in the late war,

and his body is fastened together in several places with metal joints. It is reported that both elbows are patched with platinum, a disc of platinum covers a hole in the top of his skull, his right ankle is more than half platinum, and there are four platinum patches in his legs. In addition he carries various metallic patches inside his torso. If he keeps on flying he will need some more patches, for he possesses the reckless daring that usually ends in disaster. (Since the above was written Captain Nungesser has not been seen since leaving Paris on his perilous undertaking.)

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THE American Medical Association now has approximately ninety-four thousand members. There is an unstable membership of five or six thousand due to neglect to pay dues on time. A part of this six thousand is in Indiana where every year from two hundred to four hundred physicians are delinquent in the payment of State Association dues, and as a result are wiped off the membership rolls of the A. M. A. There is no good excuse for this state of affairs, and the delinquent physicians ought to be ashamed of themselves for such carelessness, and for giving officers of not only the state association but the A. M. A. a great deal of extra work that could be avoided through payment of dues on time.

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AN effort is being made to convert *THE JOURNAL* to the idea that there are one or two collection agencies for doctors that really are meritorious and worthy of patronage. However, we are, figuratively speaking, "from Missouri" and will have to be shown. Finally, we are of the opinion that every doctor can collect his own bills better than anyone else, and that for the most part he stands a good chance of being "trimmed" in one way or another if he patronizes the average collection agency. There may be a trustworthy collection agency doing a widespread business over a large territory, but proof of such trustworthiness should be very convincing to any doctor who seeks the services of an enterprise of that kind.

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THE City hospital in Indianapolis has been selected as the headquarters for the annual session of our State Medical Association to be held the last week in September. The hospital with its new addition and recent general reconditioning offers all equipment and facilities necessary for taking care of the activities of the Association. There will be no formal papers presented, as a great part of the time of the session will be devoted to general and special clinics. The technical or commercial exhibit will be one of the features of the convention and already most of the spaces have been sold. The Association is convening at the City hospital as a result of an urgent and cordial invitation extended by the Indianapolis City Board of Health.



As usual the liquor question popped up in the deliberations of the House of Delegates of the American Medical Association at the Washington session. In order to avoid any misinterpretation of the discussion, the meeting at which the resolutions were considered was made an executive session. The final result was the adoption of a resolution setting forth the fact that Congress, or no body of laymen, should pass judgment upon physicians as to the amount of any therapeutic remedy that should be prescribed for the relief of the sick. This resolution was aimed at the decision of Congress, forced through by the "drys," that no physician should be permitted to prescribe more than a pint of alcoholic beverages to any one patient within a period of ten days.

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THOSE who attended this year's session of the American Medical Association were impressed to a greater extent than ever before that Washington is a beautiful city, and that the United States government should devote every energy to improve its artistic setting so that for all future time Washington will be a fitting representative of this nation as a capital. As a place of meeting for the American Medical Association it proved to be very acceptable from every standpoint. An abundance of hotel accommodations and good facilities for all of the activities of the Association were afforded. Aside from this there were the attractions which generally go with a meeting at the nation's capital, to say nothing of the personal appearance of the President of the United States at the opening meeting.

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THE committee on arrangements for the next session of our Indiana State Medical Association to be held in Indianapolis the last week in September, is doing some excellent work in an effort to complete a program that will mark a distinct advance in drawing qualities and assure in advance to those who go to Indianapolis that they will have no grounds for complaint concerning the scientific and social features offered them. As tentatively arranged, the program will consist largely of dry clinics, though there will be innumerable demonstrations of one kind or another that are of practical benefit to the entire membership. Aside from this there will be the usual social features which in the capitol city usually are equal to or better than anything that can be afforded in any other portion of the state.

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As the business manager of the A. M. A. well says, the technical exhibit at the A. M. A. session is a vast treasure house of medical help. Essentially it is an exposition and not a sales room. Visitors are not unduly urged to make purchases. Therefore, everyone is free to visit every exhibit and ask questions or seek information. In other words, the exhibit as a whole constitutes one of the educational features of the convention. Here

may be found instruments and reference works for which the physician has long been looking and which would take considerable time and effort to locate elsewhere. At Washington the exhibits occupied three floors, and even to those familiar with the best in equipment, the exhibit was a revelation concerning pains taken by the manufacturer to give the physician adequate service and support.

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WILL ROGERS says that nearly a million flood sufferers in the South are being helped by the Red Cross and other welfare organizations, and that what money has been donated by the benevolent people of the United States will not go far in caring for those deserving people. He then pays his compliments to the uplifters by saying that if a million Armenians or Chinese were flood sufferers, like the people in our own South, a great plea for financial help would go forth to the American people, and money would pour into the hat like water over a dam. In fact, it does seem as though the old saying "Charity should begin at home" is given scant attention by the American people. We never seem to think that calamity is quite so bad near home as we do if it occurs in Turkey or China, or some other foreign country.

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A FANATICAL humanitarian says that lobsters should not be broiled alive nor should oysters be eaten alive, as unnecessary suffering is caused thereby. How to stop the cruel practice is a problem for which no remedy is offered. Perhaps we shall be asked to chloroform all the oysters before we eat them, and administer laughing gas to all lobsters before they are broiled. If some of these fanatics who labor so industriously to protect dumb animals and make life more comfortable for oysters and lobsters would pay a little more attention to the work of making human beings more comfortable, the world would be a much better place in which to live. Humanitarian activity in behalf of the lower animals is an excellent thing and should be supported, but it is overworked in a most inconsistent manner by many rabid enthusiasts.

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As we go to press, Captain Charles Lindbergh is receiving a wonderful ovation in Europe as a result of his successful flight alone from New York to Paris without a stop. Already he has been received by the president of France, the king of Belgium, the king of England, and many other members of royalty and dignitaries of high position, and various orders have been conferred upon him and he has been winned, dined and toasted far more than ordinarily falls to the lot of a potentate. At this writing we are wondering if the United States will give him as much of an ovation upon his return to the United States as he has received everywhere abroad. He deserves just as much attention from home folks as he received from

foreigners, and we sincerely hope that his accomplishment and his welcome home in consequence will not be another case of "honor save in his own country."

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OUT of a membership of approximately 94,000 the A. M. A. boasts of having approximately 61,000 Fellows. That number of physicians are making a direct contribution to the support of the A. M. A. and participate more actively in the undertaking. Indiana is credited with 1,614 Fellows out of a state association membership of practically 2,800. This state ought to furnish greater support of the A. M. A., and this is all the more indicated when we take into consideration the fact that the *Journal of the A. M. A.* alone is worth more than the Fellowship dues. For the benefit of those who may not thoroughly understand the question of eligibility, we desire to say that any Indiana physician who is in good standing in the State Medical Association is eligible for Fellowship in the A. M. A., and the expense of the latter is five dollars per year. Subscription to the *Journal of the A. M. A.* goes with Fellowship.

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EMOTIONAL instability is a condition that must be handled by the physician with a good deal of tact and sympathetic understanding. Those patients of an emotional nature make up a large proportion of the cases that go from internist to internist and specialist to specialist in an endeavor to get rid of imaginary troubles, or perhaps we should say slight ailments that an acute imagination pictures as being formidable ailments. In an address upon this subject at Washington an internist made the statement that too many physicians avoid being perfectly frank with such patients by stating the facts, but he admitted that patients suffering from an unbalanced emotional nature come into the world predestined to trouble and with a nervous system that is not durable they finally snap. He concluded his address by quoting the old German proverb, "It is not what we experience, but the way we receive what we experience that determines our destiny."

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THE *New York Health Bulletin* recommends that all physicians should be thoroughly informed concerning the fallacies connected with the teaching and practice of chiropractors, osteopaths, naturopaths, and all other medical pretenders of whatever breed, and for the distinct purpose of pointing out to patients the inconsistency of employing such incompetents. It is foolish to condemn and abuse chiropractors and others of the kind when their names are mentioned by patients, as the logic of argument is all on the side of the educated and trained regular physician who should be able to point out the fallacies of the cults. This should be done in the manner and the state of mind of the teacher and not with the

attitude of the prosecutor or persecutor. The cults, without a single exception, are the products of ignorance, incompetency and lack of training. It should be no difficult matter to point out these deficiencies to any reasonable-minded lay person.

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THE Council on Medical Education and Hospitals of the American Medical Association recommends that adequate instruction in the traditions and principles of medical ethics be included in the required curriculum of all medical students. Why stop at medical students? There are a great many practitioners of medicine—some of whom have been out of medical schools for many years—who need instruction in medical ethics far more than do the medical students. We could name a few doctors who in our judgment never had any ethics, or even a keen sense of honesty. We are not saying that the medical profession has any more scamps and scalawags than any other profession or vocation, but it might have some one discuss medical ethics in our medical societies about once a month, and occasionally it would serve a useful purpose if some of the unethical and piratical doctors received a sound thrashing from some aggrieved member of the medical profession.

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The president-elect of the A. M. A., Dr. J. N. Jackson, made a very appropriate address before the House of Delegates at the Washington session, in which he not only defended the principles of medical ethics but urged that a course of instruction concerning the same be made a part of the curriculum of every medical college whose standards merit recognition. In the discussion of the subject Doctor Jackson said: "The principles of medical ethics as promulgated by our Association is an attempt to outline the pathway for conduct in human relationship which shall make him who follows it worthy of that faith and trust on which our real standards must rest. Knowledge alone is not enough. A scholar may yet be a scoundrel. One may be wise and yet not worthy. Education and character must go hand in hand if the ideals of our profession are to be maintained. Is it not therefore obvious that our medical educational systems should develop character as well as impart scientific knowledge?"

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THE radio is being used by quacks and charlatans of every description to humbug the people. It was bad enough to have the chiropractors establish a broadcasting station of their own and thus advertise the reputed virtues of their peculiar form of practice, but it is nauseating to hear over the radio that some proprietary remedy, or some form of magnetic treatment will bring health and happiness to anyone who is sick. Not so long ago the editor of THE JOURNAL heard over the radio some of the most preposterous statements concerning ill health, accompanied by the most optimistic



promises concerning cure if those desiring health will patronize a well advertised species of quackery. At once the thought arose that the radio, like some newspapers, is aiding and furthering fraud and deception for the sake of financial gain. What a pity it is that broadcasting stations do not adopt the rule of cutting out medical advertising of every description, and licenses should be refused to those stations that do not agree to follow such policy.

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THIS is the season for child health clinics, and Indiana is having the usual crop of shows. These clinics are well advertised through the influence of various uplift organizations, and the activity of one of the departments of the Indiana State Board of Health, perhaps sponsored or sustained in a large measure by the provisions of the Shepepard-Towner act. We notice that the clinics also are indebted to a considerable number of reputable medical men who gratuitously give of their time and service to the work of examining the children brought for the purpose. To us the amusing feature of the whole thing is that while the uplifters, the State Board of Health, the printers, caretakers, and many others get a lot of credit for the clinic and what is accomplished by it, not one word of thanks or acknowledgment of any kind is given to the physicians who give the most valuable service of all, for it is upon their judgment that the ratings are based. It is a fine lot of gratitude that doctors get for any public service they render!

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ANY physician who fails to visit the commercial exhibits at any of the state or national association sessions is missing a great educational feature. At the Washington session of the A. M. A., the commercial exhibits were of unusual interest from a scientific point of view, for at the exhibit could be found many instruments, drugs and appliances that were displayed for the first time, and most of them marked a distinct advance in the equipment offered for work in the better practice of medicine. Associated with the commercial exhibit was the scientific exhibit which year after year is becoming such an important feature in the educational value of our sessions. This year the scientific exhibit was of unusual merit, and any physician attending the Washington session could have attended the scientific exhibit continuously throughout his stay in Washington and found the time spent there exceedingly profitable. The scientific exhibit is an enormous expense to the Association, but it well repays the Association for benefits conferred upon members.

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MORE and better scientific work on the part of county medical societies should be the rule. Throughout the past year there were many of the societies in Indiana that have shown commendable enterprise in maintaining efficient working

bodies and uniformly have carried out programs of superior excellence. On the other hand there are some county medical societies that have been dormant throughout the entire year, and still others that have existed in a sort of half-hearted way with uninteresting and infrequent programs to attract attendance at meetings. The officers of county medical societies should remember that our executive secretary stands ready to offer assistance in securing outside essayists or speakers if called upon for that purpose. It is recognized that some county medical societies cannot within their own membership supply a suitable number of papers or talks to keep the societies active throughout the year, and it is with the idea of helping these societies that our executive office is offering to provide competent speakers.

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IN accordance with an action taken last year at the Dallas session of the A. M. A., a survey of the physical condition and financial status of the members of the American Medical Association who are incapacitated for earning their support by the practice of their profession has been made and the report presented at the Washington session this year. The idea in making the report was with the object of determining the advisability of establishing, managing and maintaining a home or homes for the care and maintenance of indigent physicians. After making the survey the committee reports that the results of its investigations convince the committee that the need for a national home for incapacitated and indigent physicians is not sufficient to warrant the American Medical Association in establishing, managing and maintaining such an institution. In connection with this report, the effort on the part of a private enterprise to saddle upon the association an enterprise that has had more or less publicity, and featured by highly sensational, sentimental pleas for funds for its creation and maintenance, was turned down.

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ONE of the prominent newspapers of Indiana refused to accept the advertising of a so-called food specialist who is recommending diet as the only thing necessary to cure certain diseases, even cancer. This is very commendable, but all of the good effects were nullified a week or so later when the same paper carried a large amount of advertising of quacks who promised restoration of health through the use of special electrical apparatus, recommended as being especially adapted to the removal of disease of any kind. The same newspaper also carries the rottenest kind of proprietary medicine advertising, while its editorial pages prate of adherence to the highest principles of truth and honesty and the welfare of the public. Of course the editor and proprietors know that quack medical advertising is detrimental to public welfare, and harmful to a class of people who can ill afford to be humbugged. In

other words the newspapers that carry quack medical advertising are aiding and abetting a fraud. Their consciences are elastic because it means profit in dollars and cents. To the average newspaper owner, honesty ceases to be a virtue when it comes to accepting medical advertising contracts.

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THE Louisiana State Board of Health publishes a regular almanac. It gives astronomical data and phenomena for the current year. This includes chronological cycles and eras, solar and lunar eclipses, transit of planets, record of rise and setting of the sun and moon, planetary configuration, and much other useful information. In fact it is the kind of an almanac that a great many people like to keep handy for reference. It will take the place of the almanacs sent out by patent medicine firms, and instead of the usual reading matter concerning various diseases and their treatment by proprietary medicines as found in the ordinary almanac, the Louisiana State Board of Health has published in its almanac a great deal of very useful and trustworthy information concerning individual and community health. The commoner diseases are described and information given as to their care and eradication. Some excellent rules concerning diet, fresh air and the manner in which diseases are transmitted are given. The whole almanac is a part of the campaign of education of the public, and it ought to serve a very useful purpose. The example well could be followed by other state boards of health.

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THE committee on arrangements for the Washington session of the A. M. A. gave assurance in advance that there would be no increase in hotel or transportation rates. We have reason to believe that the promise was fulfilled to the letter, but in passing we may say that the hotel selected as headquarters for the Association had no need to increase their regular rates in view of the fact that their established charges for practically everything put the swankiest hotel in New York in the rear without giving corresponding service. As one delegate was prompted to say, "If you are going to dance, you will have to pay for the music, so if you want to stay at the 'swellest' hotel you will have to pay the charges, even though they may be unreasonable." We may remark that sometimes the grasping hotel proprietor kills the goose that lays the golden eggs. That was the case with a Florida hotel which, when oranges were selling for from one-half to one cent each upon the streets, had the colossal nerve to charge a guest eighty cents for the juice of one orange when served at breakfast. Many idiots, apparently with more money than common sense, danced to that kind of music, but most of them did not try it the second time.

DR. WENDELL C. PHILLIPS, president of the A. M. A., at the conference on public health, made a very appropriate statement when he said that "There is not enough mutual understanding and teamwork between the general practitioners of medicine and public health workers." In Indiana things would go along smoother if there were a little more spirit of co-operation and a tendency to get together in working out our mutual problems. As it stands now, the medical profession does not seem inclined to ask any counsel or advice from the health officers, and, on the other hand, the health officers do not show any disposition to take counsel and advice from the medical profession. This is not conducive to the best interests of either, and in the long run it is detrimental to the public that both are expected to serve. With the idea of having the two factions get better acquainted we have asked the secretary of the State Board of Health to furnish material for a department in *THE JOURNAL*, in which the objects and the policies of the Board of Health should be presented to the medical profession of the state. We shall be glad if we can help to bring about better teamwork between the Board and the medical men of Indiana.

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IN the opinion of John E. Walker, Washington, D. C. (*Journal A. M. A.*, May 7, 1927), the Kahn precipitation test has the obvious advantages of rapidity and economy; it is also characterized by technical stability and dependability to a degree not possessed by the Wassermann test. The stronger the Kahn test, the greater is the probability of the patient being syphilitic. This probability, being based on past statistical experience with an empiric method, never becomes unity, or absolute certainty. No absolute diagnostic significance can therefore be given to any result. The functions of the Kahn test in the diagnosis of syphilis are two: (a) To suggest the possibility of syphilis in patients in whom syphilis was not previously suspected, and thereby lead to more careful and thorough examination. (b) To add an indefinite amount of confirmatory evidence to previous diagnoses or suspicions of syphilis. As a result of a combination of technical, clinical and mathematical considerations, these limitations as to the significance of serologic results apply in varying degrees to all of the different modifications of the Wassermann reaction. The Kahn test is therefore to be preferred as an aid in the diagnosis of syphilis on account of its technical simplicity and greater promise of uniformity.

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THE American people already have donated more than twenty million dollars for the relief of flood sufferers in the Mississippi valley. It probably is much too small an amount to meet the needs but it will go a long way toward affording relief to the stricken inhabitants. The mammoth property loss, running into hundreds



of millions of dollars' in value, cannot be taken care of by any generosity on the part of the American people. However, loss of property and life could have been prevented had our government used the brains of a chickadee in providing the protection many competent engineers long ago pointed out as necessary and possible to secure. Probably we shall now follow the old saying of "locking the barn after the horse is stolen," and provide funds and labor to carry out flood prevention plans that should have been put into effect many years ago. What a pity it is that such a rich and powerful nation should be so criminally negligent in every sort of preparedness. We even are courting another war, with all that it means in the destruction of life and property, through our negligence in preparing for defense in case of assault by covetous or quarreling nations. We pay dearly for our experiences and never seem to learn that an ounce of prevention is worth a pound of cure.

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WE have just read that a prominent physician in one of the western states is using an airplane regularly to take care of a very large practice that extends over a large territory. Certainly that is up to date service, and is an example of progressiveness that might be followed by others, and even by our own government. All citizens of the United States should blush with shame when the subject of aviation is discussed, and attention is directed to the apathy and indifference with which conquest of the air is considered by this country. Foreign nations and private enterprises in foreign nations have taken up aviation in earnest, with the result that commercial lines of aircraft are flying all over Europe, and all of the principal nations of Europe are developing airplane defense. Such policy is in keeping with the recognition of the fact that future wars will be settled in the air, and that a single flock of airplanes can devastate a whole country and wipe out an army and navy unless checked by similar means of offense and defense. At present America is the laughing stock of the world when it comes down to a question of defense. Perhaps if we encourage private enterprise in taking up airplane travel it will have a beneficial effect in stimulating our government to do something worth while along this line.

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THE federal parole board has recommended the release from Atlanta penitentiary of Warren McCray, former governor of Indiana. If the attorney general approves the recommendation, McCray will be at liberty on August 1, after having served a third of his term of ten years.

McCray was convicted on thirteen counts of having used the mails to defraud. He was in office at the time of his conviction. His victims included men and women of limited means who

trusted him because of the high office he held. He betrayed the confidence reposed in him. His defense was a denial of intent to defraud. He admitted signing other men's names but said he thought he was solvent when he did it.

The jury, we believe, evaluated that defense at about the proper figure, but almost since the day of the conviction efforts have been made to win a pardon for the fallen governor. Political pressure has been used in Washington and social pressure has also been exerted. Until now the effort has been resisted and the resistance should continue. McCray in prison is an object lesson to the country in the impartiality of the law; so long as his punishment continues, no man can say that our justice is one thing for the humble man and another for the man of position. McCray liberated provides an object lesson of a wholly different variety.—*Chicago Daily Tribune*, May 21, 1927.

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It seems to be quite the fad of some life insurance companies to write policies for small amounts without a medical examination of the applicant. Why stop at the small policy? If it is a logical and sound business proposition to write insurance policies for one thousand dollars each, it ought to be just as logical and sound to write them for fifty times that amount, for the principle applied is the same in either case. As a matter of fact these policies without examination are not written without some inquiry as to the state of the health of the applicant, and as one writer has well said, "the companies desire to play safe and they ask the opinion of scientific medicine but do not care to pay for it, so they have adopted a rather deceptive scheme to obtain the information by writing the family physician for information as to the insurability of the risk." Some physicians fall for this sort of imposition while others throw the requests of insurance companies in the waste basket. As a matter of fact, this effort to secure confidential medical information without cost or even at a paltry fee of a dollar or two for filling in a long blank containing numerous technical questions, should be turned down. There is no reason why members of the medical profession should aid in helping doubtful risks to profit at the expense of good risks, and that is exactly what occurs when life insurance is written without examination.

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IN Indiana physicians are not permitted by law to possess or to prescribe even a teaspoonful of liquor of any kind. The law governing this matter has been on the statute books for many years. We are not going to go so far as to say that Indiana physicians do not find cases in which they believe that liquor is indicated and would prove beneficial, but they seem to find some way to get around the needs. Neither are we going to be so rash as to say that Indiana

physicians as a whole believe that this bone-dry attitude as it pertains to prescribing liquor is a good thing for the profession or the public. We are very greatly amused to hear some of our confreres in Illinois, New York, and some other states complaining bitterly because they are permitted to prescribe such a limited quantity of liquor to any one patient. Bless their dear souls, Indiana doctors would be tickled pink if they even had the privilege of prescribing alcoholic liquors in any limited quantity. We recognize the justice of the claims put forth concerning the abridgement of the rights of a physician to be the judge as to what he shall prescribe for a sick person, and we hope that success will crown the efforts of those who would place more confidence in physicians as to their judgment in deciding the amount of alcoholic liquor that a patient can have as medicine. Why prohibition, anyway, when it never was and never will be enforced?

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WE are getting a little bit tired of the way some of the big men in the medical profession exploit themselves in the lay press and over the radio. They camouflage their purposes under the specious plea that they are talking public health or trying to educate the laity concerning the prevention of disease, but when we come right down to brass tacks such conduct is self-exploitation pure and simple. Our argument has been and will continue to be that this work of educating the public can be carried out under the auspices of our regularly constituted medical organizations, and it will have just as much weight if not more when sponsored by organizations as it will when sponsored by individuals. Why should Dr. Know-It-All's opinion, expressed in the lay press, have as much effect as an opinion expressed by the American Medical Association or any State Medical Association. In fact, we are under the impression that the lay press will take for publication articles that have been sent in by reputable medical organizations a good deal oftener than they will take articles from individuals. We have no fault to find with the paid public health worker or other salaried physician whose duty it is to educate the public, but we do criticize and condemn the doctor who is seeking private practice and who virtually exploits himself by means of various newspaper articles supposedly presented in the interests of the public good but adroitly prepared to advertise the writer.

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It is remarkable to what length the drugless practitioners go to get propaganda before the people, and still more remarkable how Christian Scientists and spiritual healers of various breeds can get their publications so widely distributed. Christian Scientists have perhaps the finest press agency in the world and they manage to get their stuff printed in lay periodicals at little or no

expense to themselves. Another way of spreading propaganda is by the distribution of pamphlets and reading material to public restrooms where it is left, by consent or otherwise, for the perusal of all who may care to read such nonsense. *The Nautilus*, said to be a magazine of new thought, is an able ally of Christian Science, and it finds its way into a number of public reading rooms. This fanatical publication preaches the gospel of accomplishment through spiritual regeneration. The point is made that disease and deformities may be cured, a recreant husband may be brought to the loving embrace of a wife, and even worldly riches are made possible through the influence of "new thought processes." Such drivel can be found in many public reading rooms, and we wonder why some trustworthy information concerning health, such as found in *Hygeia*, cannot be placed in every public reading room in the land through the influence of educated physicians who could well afford to be obligated for the subscription. At least *Hygeia* would offset some of the idiotic teachings concerning the cause and treatment of diseases and deformities as preached regularly in the *Nautilus* and Christian Science publications.

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THE director of the commission on medical education asserts that approximately 40 per cent of the current graduates in medicine are going directly into the specialties. In some schools it runs anywhere from 75 to 90 per cent, one school reporting that 100 per cent of the men go directly into the specialties. About 50 per cent of those going into the specialties are going in without any clinical experience. About 54 per cent of recent graduates are going directly into the specialties without a period of general practice which many have thought ought to be required before specialization. This leads to the suggestion, often made in the columns of *THE JOURNAL*, that there should be some specific requirements demanded of those who are going to enter the specialties, and one of the chief requirements should be either several years of general practice or from eighteen months to two years of service in a general hospital. Aside from this, the man who enters a specialty ought to show evidence of having had adequate training and education in the specialty which he chooses to follow. This means an intensive course of from eighteen months to two years devoted exclusively to the specialty selected. Today we are suffering from not too much specialization but too many illy qualified and poorly trained specialists. Too many men are attempting to do major surgery without even training in the rudiments of surgical work. What is true of surgery is true of all of the other specialties. Perhaps the greatest offenders are those who essay to do ophthalmology and otolaryngology. For the good of the profession



as well as the public there ought to be some recognized method of separating the wheat from the chaff.

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ACCORDING to the terms of a resolution passed by the House of Delegates at the Washington session of the A. M. A. an effort will be made to prevent the A. M. A. from holding its annual sessions in any city that does not afford ample accommodations for any and all of the activities of the Association. This means that accommodations are required for from eight to ten thousand persons, an exhibition hall with at least fifty thousand square feet must be provided for the accommodation of the registration, scientific and technical exhibits, and ten meeting halls with an accommodation varying from five hundred to twenty-five hundred must be furnished for the use of the House of Delegates, motion picture exhibits, scientific clinics and meetings of the sections. In addition there must be a theater or large hall for the opening meeting, and the same place can be used for the reception of the president. Inasmuch as an annual session of the American Medical Association is worth from three hundred thousand to a half million dollars to any city where the session is held, it stands to reason that the Association should be furnished appropriate accommodations, and that there should be a guarantee that there will be no increase in the hotel rates or transportation charges by taxicabs. Furthermore, the Association should be put to a minimum amount of expense for arrangements. According to the resolution passed at Washington it will be possible for the Board of Trustees to secure in advance all necessary data before making any decision as to the place for holding the annual session, and authority is given to change the location of the site chosen by the House of Delegates if the local arrangements are unsatisfactory.

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WE are told that there is a great depression in business right now. Many factories are running on half time and with half forces, and business houses are cutting down overhead by limiting the number of employees. Medical men meet with the complaint from patients that doctor bills cannot be paid until conditions improve. However, we haven't heard of any particular leniency being granted to members of the medical profession in connection with the payment of bills. If a doctor owes any money, he is expected to pay promptly. Even the average merchant expects his doctor to wait several months before being paid for professional services rendered but has no hesitancy in asking his doctor to pay cash or make arrangements for prompt payment very shortly after the obligation is incurred. Furthermore, if a doctor seeks the services of any one of the army of unemployed he often is expected to pay even more than the prevailing rates for such services,

and then witness a fine example of shirking. We cannot arouse a lot of sympathy for the average mechanic or laboring man, for altogether too often we have had the experience of paying for dishonest service. We are not so much concerned about the rate charge as we are concerning the competency and fidelity with which the work is done. In other words, no matter what the wages are we feel that a day's work should be given for a day's pay, whereas in this day and age the slogan seems to be "Get the highest wage but give the least for it." With conditions as they are we believe that physicians ought to be just as exacting as those following other vocations when it comes to the question of remuneration for professional services rendered. A reputable physician will be charitable to the poor, and lenient where leniency is due, but there is no reason why he should not pursue business methods in collecting his due from those able to pay and thus put himself on the same plane as those with whom he deals in a business way and who expect doctors to pay promptly.

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MEDICAL men take too little interest in politics. In consequence there are a number of enterprises directly or indirectly associated with the practice of medicine in some form that suffer as a result of the lack of influence of the medical profession. For instance our State Board of Medical Registration and Examination for many years was run as a sort of political side show, without reference to the influence of the medical profession, and it has been only within recent years that the appointments on this board have received the recommendation and endorsement of the medical profession. The same is true of the State Board of Health, and right now appointments to places on that organization are dependent very largely if not wholly upon politics and with little or no regard for the recommendations of the medical profession. In fact, there has been an almost distinct separation of the department of health from every activity and influence of the organized medical profession of Indiana. Whenever the Board needs some assistance in carrying out radical public health measures, then it is quite willing to come to the medical profession for support, but that is about the only time that there is any line of contact between the two. In fact, within recent years the Board of Health has done some things that are directly antagonistic to the consensus of opinion of the medical profession by sponsoring the Sheppard-Towner act and really engaging in the practice of medicine by running various clinics. This is a step in the direction of state medicine, but it is not the only feature of which the medical profession has complained, for it is not so long ago that we called attention to the prostitution of the state laboratories to the greed of some rapacious doctors as well as lay persons through the rendering of gratuitous

laboratory services when such work should be done by private laboratories that are in no position to compete with the state. Furthermore, there is no reason why the people should be pauperized or encouraged in dependency of this sort. All of which we offer as an argument that the organized medical profession of Indiana should take an interest not only in appointments to the various state boards to which medical men are appointed, but should take an interest in the policies of those boards and make its influence felt in the shaping of conduct that is in keeping with fairness, progressiveness, and the ethics of medical practice. The whole subject should be devoid of party politics, and appointments for these various boards should not be based upon adherence to any political creed nor should they go as a part of political spoils to pay political debts. The appointments should meet with the approval of an organized medical profession which stands for competency and the highest ideals of service.

THE following Indiana physicians registered at the Washington session of the American Medical Association:

MONDAY, MAY 16th

Batman, Fred H., Bloomington.  
 Baxter, J. W., New Albany.  
 Bernheimer, H. L., Terre Haute.  
 Boggs, Eugene F., Indianapolis.  
 Beavers, Benjamin F., Decatur.  
 Bolman, R. M., Fort Wayne.  
 Bosenbury, Charles S., South Bend.  
 Bowers, Harvey C., Akron.  
 Boyers, James S., Decatur.  
 Bulson, Albert E., Jr., Fort Wayne.  
 Carmack, John W., Indianapolis.  
 Christophel, W. B., Mishawaka.  
 Cowing, Hugh A., Muncie.  
 Cregor, F. W., Indianapolis.  
 Crockett, F. S., Lafayette.  
 Culmer, W. N., Bloomington.  
 Dailey, John E., Terre Haute.  
 Davis, Wm. M., Worthington.  
 Dunn, F. W., Muncie.  
 Eberwein, J. H., Indianapolis.  
 Eckhart, G. G., Marion.  
 Elliott, Harry, Brazil.  
 Elliott, J. C., Guilford.  
 Eshleman, L. H., Marion.  
 Farbar, Marian E., Richmond.  
 Field, Wm. H., Evansville.  
 Foster, Willard H., Zionsville.  
 Giordano, Alfred S., South Bend.  
 Gowland, Harry E., Valparaiso.  
 Graham, A. B., Indianapolis.  
 Grayston, Wallace S., Huntington.  
 Hade, F. L., Baidgeport.  
 Hendricks, Thomas A., Indianapolis.  
 Howard, C. Norman, Warsaw.  
 Johnston, M. F., Richmond.

Kast, Marie B., Indianapolis.  
 Kimball, G. W., La Porte.  
 Krueger, E. O., Michigan City.  
 Lapenta, Vincent Anthony, Indianapolis.  
 Lee, John Moffett, Rushville.  
 Lonfellow, Don, Martinsville.  
 McGaughey, W. M., Greencastle.  
 Marshall, Cavins R., Indianapolis.  
 Miller, S. T., Elkhart.  
 Mozingo, Arvine E., Indianapolis.  
 Ross, David, Indianapolis.  
 Ruddell, Karl, Indianapolis.  
 Sammons, Leslie C., Shelbyville.  
 Sayers, Frank E., Terre Haute.  
 Schweitzer, Ada E., Indianapolis.  
 Shanklin, E. M., Hammond.  
 Shimer, Will, Indianapolis.  
 Smith, E. Rogers, Indianapolis.  
 Stauffer, W. A., Elkhart.  
 Terflinger, F. W., Logansport.  
 Terrell, W. H., Pittsboro.  
 Tomlin, Wm., S., Indianapolis.  
 Tucker, W. W., Greencastle.  
 Warvel, John H., Indianapolis.  
 Weller, C. A., Indianapolis.  
 Weyerbacher, Arthur F., Indianapolis.  
 Woolely, Homer, Bloomington.  
 Wright, S. William, Indianapolis.  
 Wygant, M. D., Mishawaka.  
 Zerfas, Leon G., Indianapolis.

TUESDAY, MAY 17th

Ash, E. E., Goshen.  
 Beeler, Raymond C., Indianapolis.  
 Bibler, Henry E., Albany.  
 Briggs, C. F., Sullivan.  
 Butler, Raymond A., Beech Grove.  
 Bulson, Eugene L., Fort Wayne.  
 Cameron, D. F., Fort Wayne.  
 Carter, L. D., Indianapolis.  
 Cleveland, W. R., Evansville.  
 Clevenger, William F., Indianapolis.  
 Combs, Pearl B., Evansville.  
 Doerr, John E., Mt. Vernon.  
 Duggan, James A., South Bend.  
 Durrie, Anna B., Michigan City.  
 Fleming, J. C., Elkhart.  
 Keiper, George F., Jr., Lafayette.  
 King, William F., Indianapolis.  
 Larkin, Bernard J., Indianapolis.  
 Lingeman, E. L., Indianapolis.  
 Mentzer, S. E., Monroeville.  
 Northrup, A. H., Markle.  
 Pulliam, J. Matthew, Fort Wayne.  
 Rarick, J. E., Wolcottville.  
 Rhamy, B. W., Fort Wayne.  
 Senseny, Herbert M., Fort Wayne.  
 Thompson, W. A., Liberty.  
 Williams, Wm. H., Dale.  
 Wishard, Fred B., Anderson.  
 Wood, E. U., Columbus.  
 Veazey, W. M., Avilla.



## WEDNESDAY, MAY 18TH

Acker, Robert B., South Bend.  
 Brown, L. W., Fort Wayne.  
 Collins, Clement C., Roachdale.  
 Ensminger, L. A., Indianapolis.  
 Hagie, Franklin Eugene, Richmond.  
 Hoffman, Robert V., South Bend.  
 Loop, Floyd A., Lafayette.  
 Lyon, M. W., Jr., South Bend.  
 Lyon, Martha Brewer, South Bend.  
 Marshall, Geo. D., Kokomo.  
 Moore, Robert M., Indianapolis.  
 Pfaff, Dudley A., Indianapolis.  
 Ravdin, M., Evansville.  
 Ritchey, J. O., Marion.

## THURSDAY, MAY 19TH

Davis, Albert T., Marion.  
 Dancer, Chas. R., Fort Wayne.  
 Hughes, W. F., Indianapolis.

**DEATHS**

BRUCE FLEETWOOD, M.D., of Linton, died April 15th, aged fifty years. He graduated from the Kentucky School of Medicine, Louisville, in 1901.

R. E. CLARK, M.D., of Shelbyville, died April 19th, aged seventy-four years. Dr. Clark graduated from the Medical College of Ohio, Cincinnati, in 1891.

JOHN W. NOLAND, M.D., aged seventy-two years, died April 16th at his home in Monon. Dr. Noland graduated from the Kentucky School of Medicine, Louisville, in 1882.

B. D. BRADFIELD, M.D., of Logansport, died April 8th, aged seventy-six years. Dr. Bradfield graduated from the University of Michigan Medical School, Ann Arbor, in 1877.

WILLIAM G. CHAFFEE, M.D., of Huntington, died May 10th, aged ninety-two years. Dr. Chaffee graduated from the Northwestern University Medical School, Chicago, in 1869.

W. L. T. GRANT, M.D., of Muncie, died April 14, aged fifty-two years. Dr. Grant had practiced medicine in Muncie for twenty-five years. He graduated from the Hospital College of Medicine, Louisville, in 1900.

**NEWS NOTES AND PERSONALS**

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION*. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better *Journal* for you.

DR. H. R. ALLEN, of Indianapolis, recently has returned from an extended hunting trip in China and India.

DR. P. B. COMBS, of Evansville, has sailed for Europe where he will attend clinics in various universities.

DR. MILTON T. JAY has returned to the practice of medicine following several years' service as postmaster in Portland.

DR. A. H. HAROLD, of Indianapolis, has recently accepted the position as medical director at the French Lick Springs Hotel.

THE annual meeting of the Elkhart County Medical Society was held April 14th with headquarters at the Hotel Elkhart, Elkhart, Indiana.

DR. WILLIAM W. WEAVER, of Elizabeth, has gone to New York City where he will take special work in diseases of the eye, ear, nose and throat.

THE Huntington County Medical Society held a meeting at the Hotel LaFontaine, Huntington, April 5th. Dr. F. B. Mitman, of Bippus, presented a paper.

THE sixty-third annual meeting of the American Ophthalmological Society will be held at the Chateau Frontenac, Quebec, Canada, on June 27, 28 and 29, 1927.

DR. E. RAY ROYER, formerly assistant director of the New Highland Sanitarium in Martinsville, has been appointed medical director of Milan Springs Hotel, Milan, Indiana.

DR. L. W. BROWN, Fort Wayne, attended the annual meeting of the Medical and Surgical Section of the American Railway Association, held in Richmond, Virginia, May 16-17, 1927.

DR. T. C. ELEY, of Plymouth, has gone to New York where he will take special courses in surgery at the Postgraduate Medical School and Hospital. He will return home about July first.

THE members of the Madison County Medical Society were the guests of the Sisters of St. John's Hospital, Anderson, May 17th. Dr. V. H. Moon, of Indiana University School of Medicine, presented a paper.

DR. VIRGIL H. MOON, formerly professor of pathology at the Indiana University School of Medicine, has been appointed head of the Department of Pathology in Jefferson Medical College, Philadelphia.

THE United States Civil Service Commission announces open competitive examination for social worker (psychiatric). Applications will be rated as received by the Civil Service Commission at Washington, D. C., until June 30.

RECENTLY Dr. John H. Green, of North Vernon, and Dr. C. R. Marshall were selected to serve on the State Board of Health. The election of a secretary, whose term expired in April, was deferred until a future meeting of the board.

THE regular meeting of the Muncie Academy of Medicine was held May 13, at the Hotel Delaware. Dr. Carl E. Badgley, of the University of Michigan School of Medicine, presented a paper, his topic being "Fractures of the Tibia and Fibula."

DR. W. H. FOREMAN, of Indianapolis, who is traveling abroad, will travel fifteen thousand miles before his return home about July 1st. He will visit Italy, Egypt, Palestine, Syria, Turkey, Greece, Austria, France, Belgium, the Netherlands and England.

THE Northeastern Indiana Academy of Medicine held a meeting at Howe Military School, May 19. Papers were presented by Dr. Davis S. Hillis, of Northwestern University Medical School, and Dr. R. D. Thompson, of Kalamazoo, Michigan.

THE United States Civil Service Commission announces open competitive examination for dietitian. Application will be rated as received until June 30. Full information and application blanks may be obtained from the Civil Service Commission, Washington, D. C.

THE well known surgical supply house of A. S. Aloe Company in St. Louis has been crowded out of their quarters at 513 Olive street (the optical store remains there) and are now located in the new Aloe Surgical Building at 1819-23 Olive street, three blocks from the Union station.

THE Muncie Academy of Medicine held its regular meeting at the Hotel Roberts, April 22. Dr. Virgil E. Simpson, of the Department of Medicine, and Professor of Therapeutics at the University of Louisville School of Medicine, discussed "Management and Treatment of Diabetes Mellitus."

THE Colorado Ophthalmological Society and the Colorado Oto-Laryngological Society announce the fifth annual summer graduate course in ophthalmology and oto-laryngology to be given in Denver, Colorado, July 18th to 30th. Full particulars may be obtained by writing to Dr. H. L. Whitaker, 820 Metropolitan Building, Denver, Colorado.

THE United States Civil Service Commission announces open competitive examination for junior medical officer (interne). Application for this position must be on file with the Civil Service

Commission at Washington, D. C., not later than June 30. Full information may be obtained from the United States Civil Service Commission, Washington, D. C.

DR. J. H. REED, of Logansport, presented a silver cup to the Eleventh Indiana Councilor District Medical Association (Carroll, Cass, Miami, Wabash, Huntington, Grant and Howard counties) which is presented yearly to the county showing the best percentage of attendance. The thirty-seventh meeting of this association was held at Logansport, May 19.

EXAMINATIONS of candidates for entrance into the regular corps of the United States Public Health Service will be held at Washington, D. C.; Chicago, Ill.; New Orleans, La., and San Francisco, Cal., on August 8, 1927. Requests for information or permission to take this examination should be addressed to the Surgeon General, United States Public Health Service, Washington, D. C.

DR. S. T. MILLER, secretary of the Elkhart County Medical Society, reports that the Indiana University School of Medicine gave a post-graduate course to their society this winter which was highly satisfactory. He also reports splendid attendance. During the course the society was addressed by Drs. Charles P. Emerson, George Bond, J. O. Richey, John H. Warvel, C. R. Strickland, B. B. Turner and Alfred Henry.

THE United States Civil Service Commission announces open competitive examination for graduate nurse and graduate nurse (visiting duty). Applications will be rated as received at Washington, D. C., until June 30. Examinations are to fill vacancies in the Departmental Service, Washington, D. C., in the United States Veterans' Bureau, and in the Indian and Public Health Services. Full information may be obtained from the United States Civil Service Commission, Washington, D. C.

THE United States Civil Service Commission announces open competitive examination for assistant medical officer, associate medical officer, medical officer and senior medical officer. Appointments from these examinations will be made to the Veterans' Bureau, the Indian Service, the Public Health Service, the Coast and Geodetic Survey, the Panama Canal Service, the Departmental Service at Washington, and other branches. Applications will be rated as received until June 30. Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C.



MISS VERONICA STAPLETON, superintendent of nurses in the James Whitcomb Riley Hospital for Children, from its opening in 1924, resigned to accept the position of superintendent of nurses and director of the training school for nurses in the new municipal hospital of 250 beds at Tampa, Fla., May 15. Her salary is considerably higher than she received here. Almost simultaneously with the offer of the Florida position, Miss Stapleton was offered a position as inspector and supervisor of hospital nurses and training courses for all hospitals of Iowa under the state health department. Prior to coming to the Indiana University hospital, Miss Stapleton was superintendent of nurses in the children's hospital of the Iowa University School of Medicine.

SPECIAL equipment for the study and treatment of gastro-intestinal and rectal diseases has been installed in the Robert W. Long Hospital provided by a gift of more than \$2,000 placed at the disposal of Dr. Alois B. Graham, clinical professor of proctology, and specialist in gastro-intestinal and rectal diseases, by Mr. Arthur C. Newby, Indianapolis capitalist and philanthropist. The gift was prompted by the friendship of Mr. Newby for Dr. Graham, and interest in his work. No restrictions were placed by the donor on the nature of the equipment or the cost. "Get everything necessary for good work," were Mr. Newby's instructions to Dr. Graham, to whom the selection of equipment and hospital for its use was entrusted. Dr. Graham said that he considered the Long Hospital the most logical place. In conduct of the work made possible by this generous gift, Dr. Graham will be associated with Dr. John A. MacDonald, associate professor of medicine, and Dr. Rollin H. Moser, assistant in medicine, with the resident staff of the hospital under direction of the heads of the departments of medicine and surgery in the Indiana University School of Medicine.

DR. HAROLD W. POTTER, one of the resident physicians at the American Hospital in Paris, in a personal letter to us, makes interesting observations concerning medical practice in France. From his letter we quote as follows: "To the American physician, who begins his medical work in France, perhaps the most disconcerting revelation made to him is that he must acquire an almost completely new materia medica. We are taught in our medical schools in America that Latin is a universal language for prescription writing and that the Latin nomenclature for drugs is the same the world over. To our surprise we find that this is not true in France, and that unless we can master the French pharmacopeal nomenclature we are apt to be greatly embarrassed and even make serious mistakes in prescribing for patients. Our task is made more difficult by the fact that most of the medicines used in France are compounded by

some of the various French pharmacists and bear their names in place of the names of the drugs used. These names are meaningless to the average American beginning his work here. Learning the constituents of these products is much the same problem as learning the names and constituents of all of the patent medicines prepared in the United States. General anesthesia in France has not reached the high level of anesthesia in America. The apparatus used for administration of general anesthesia here, particularly that used for gas oxygen anesthesia, is primitive compared to the intricate apparatus used by well trained anesthetists in America. Ethylene is practically unknown here. Chloroform is widely used as an anesthetic in obstetrical practice and for short surgical procedures. Ethyl chloride is the anesthetic of choice rather than gas oxygen or ethylene. In nose and throat work we find that there is very little local tonsil work done in France. Ether anesthesia by the drop method is used, without the benefit of the combined suction and insufflation machines generally used in America."

THE following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:

Tablets Triturates Ephedrine Hydrochloride-Abbott,  $\frac{1}{2}$  grain.

Capsules Ephedrine Hydrochloride-Abbott,  $\frac{3}{4}$  grain.

Ephedrine Hydrochloride Solution-Abbott, 3 per cent.

Parke, Davis & Co.:

Glaseptic Ampoules Mercury Salicylate-P. D. & Co., 0.065 Gm. (1 grain).

Glaseptic Ampoules Mercury Salicylate-P. D. & Co., 0.13 Gm. (2 grains).

Glaseptic Ampoules Mercury Succinimide-P. D. & Co., 0.01 Gm. (1/6 grain).

Sigurd E. Roll:

Viking Palatable Cod Liver Oil.

Swan-Myers Co.:

Ephedrine Hydrochloride-Swan-Myers.

Capsules Ephedrine Hydrochloride-Swan-Myers, 0.0324 Gm. ( $\frac{1}{2}$  grain).

United States Standard Products Co.:

Rabies Vaccine-U. S. S. P. (Semple Method).

## SOCIETIES AND INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION

#### BUREAU OF PUBLICITY

April 25, 1927.

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D., chairman; Murray N. Hadley, M.D., and Thomas A. Hendricks, executive Association and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held April 18th read and approved.

The release, "Can You Answer These?" read and approved.

Speaker supplied for lay meeting of the Ninth district medical society for May 13th.

Request for speaker received for scientific meeting at Clinton County Hospital, April 28th.

Report received upon talk before Greensburg Rotary Club, Greensburg, Ind., upon medical legislation.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole Monday, May 2nd.

WM. N. WISHARD, M.D.,

Chairman,

THOS. A. HENDRICKS,

Secretary.

#### BUREAU OF PUBLICITY

May 9, 1927.

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D., chairman; Murray N. Hadley, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held April 25th read and approved.

The questions and answers release for May 16th read and approved.

Letter received from the American Medical Association approving the propriety of using speakers from the American Institute of Baking, if occasion arose.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole May 16, 1927.

WM. N. WISHARD, M.D.,

Chairman,

THOS. A. HENDRICKS,

Secretary.

## TRUTH ABOUT MEDICINES

### NEW AND NONOFFICIAL REMEDIES

**CULTURE BACILLUS ACIDOPHILUS—UNITED LABORATORIES.**—A pure culture of *B. acidophilus* in bottles each containing about 120 cc. It contains not less than six hundred millions of viable organisms (*B. acidophilus*) per cc. at the time of sale. For a discussion of the actions and uses of bacillus acidophilus preparations, see New and Nonofficial Remedies, 1926, p. 211, "Lactic Acid-Producing Organisms and Preparations." United Laboratories, Inc., Pasadena, Calif. (*Jour. A. M. A.*, April 9, 1927, p. 1150).

**ABBOTT'S MINERAL OIL EMULSION.**—A mixture composed of liquid petrolatum, 40 cc.; agar, tragacanth and gelatin, 2 Gm.; sugar and flavoring, 2 Gm., and water sufficient to make 100 cc. It has the action of liquid petrolatum. Abbott Laboratories, North Chicago, Ill.

**EPHEDRINE HYDROCHLORIDE—SWAN-MYERS.**—A brand of ephedrine hydrochloride-N. N. R. For a discussion of the actions, uses and dosage of ephedrine hydrochloride, see *The Journal, A. M. A.*, March 19, 1927, p. 925. The product is marketed in substance and as Capsules Ephedrine Hydrochloride-Swan-Myers, 0.0324 Gm. (1/2 grain). Swan-Myers Company, Indianapolis.

**EPHEDRINE HYDROCHLORIDE—ABBOTT.**—This product (*The Journal, A. M. A.*, March 19, 1927, p. 925) is also supplied in the form of Tablet Triturates Ephedrine Hydrochloride-Abbott, 1/2 grain, Capsules Ephedrine Hydrochloride-Abbott, 3/4 grain and Ephedrine Hydrochloride Solution-Abbott, 3%, Abbott Laboratories, North Chicago, Ill. (*Jour. A. M. A.*, April 16, 1927, p. 1235).

**GLASEPTIC AMPOULES MERCURY SALICYLATE—P. D. & CO., 0.065 GM. (1 GRAIN).**—Each cc. contains mercuric salicylate (New and Nonofficial Remedies, 1926, p. 247) 0.065 Gm.; apothesine, 0.01 Gm.; in olive oil, 1 cc. Parke, Davis & Co., Detroit.

**GLASEPTIC AMPOULES MERCURY SALICYLATE—P. D. &**

**CO., 0.13 GM. (2 GRAINS).**—Each cc. contains mercuric salicylate (New and Nonofficial Remedies, 1926, p. 247) 0.13 Gm.; apothesine, 0.01 Gm.; in olive oil, 1 cc. Parke, Davis & Co., Detroit.

**GLASEPTIC AMPOULES MERCURY SUCCINIMIDE—P. D. & CO., 0.01 GM. (1/6 GRAIN).**—Each cc. contains mercuric succinimide-N. N. R. (New and Nonofficial Remedies, 1926, p. 248) 0.01 Gm.; apothesine, 0.005 Gm.; in physiological solution of sodium chloride, 1 cc. Parke, Davis & Co., Detroit. (*Jour. A. M. A.*, April 30, 1927, p. 1398).

### PROPAGANDA FOR REFORM

**THE PREVENTION OF MEASLES.**—The need for a specific treatment of measles is evident. However, no effective measures for use after onset of the attack have been thus far developed, although methods of measles prophylaxis have been demonstrated. The efficacy of the blood serum of convalescent measles cases in preventing the disease has been established. The convalescent serum must be administered subcutaneously or intramuscularly as soon as possible after contact, the degree of protection afforded depending on the promptness with which the serum is given. Some workers advocate the use of the blood of adults or of children who have had the disease some years previously when recent convalescents are not available. The difficulty of securing a constant supply of convalescent measles serum is the chief obstacle to its wide use. Favorable results have been reported from the use of an immune goat serum. If confirmed, this may obviate dependence on a human supply. Good results have also been reported with a serum made from blood of sheep inoculated with the Berkefeld filtrate of the nasal secretion and sputum of measles patients. Attempts at active immunization by the use of blood of measles patients at the onset of the eruption have been made. These reports are interesting, but longer observation will be required before their worth can be estimated. In the treatment of established measles, the great desideratum is an effective method of preventing the dangerous secondary infections. (*Jour. A. M. A.*, April 2, 1927, p. 1081).

**ARC AND MERCURY VAPOR LAMPS.**—The carbon arc and quartz mercury arc lamps are generators of ultraviolet energy. The carbon arc lamp delivers about 5 per cent of its total spectral energy in the ultraviolet zone, and the quartz mercury arc lamp delivers about 28 per cent. An erythema dose can be readily obtained with a mercury arc but it requires a considerable exposure in the case of a carbon arc. Some believe that an erythema is necessary, whereas others believe that an erythema is unnecessary, to good clinical results. (*Jour. A. M. A.*, April 2, 1927, p. 1102).

**MORE MISBRANDED NOSTRUMS.**—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: *Tonica Para Los Nervios* (Henry S. Wampole Co.), containing calcium, sodium, potassium and strychnine glycerophosphates, a trace of lecithin, sugar, alcohol and water. *Boro-Pheno-Form* (Dr. Pierre Chemical Co.) suppositories containing cocoa butter, quinine sulphate, zinc sulphate, boric acid and traces of formaldehyde and carbolic acid. *Whitlock's Specific* (The Cherokee Remedy Co.), consisting of approximately 99 per cent of water with small amounts of alum, sodium benzoate and extract of a plant drug. *Bailey's Nu-Life* (The Tex Bailey Corporation), consisting essentially of a watery solution of epsom salt, iron chloride, salicylic acid, with red pepper and senna, flavored with sassafras and sweetened with saccharine. (*Jour. A. M. A.*, April 9, 1927, p. 1197).

**RICE RUPTURE CURE.**—Wm. S. Rice, Inc., Adams, N. Y., sells what the public is led to believe is a cure for rupture. The concern sometimes advertises under its own name and address and sometimes under the name of a stool-pigeon, one Eugene M. Pullen, Manasquan, N. J. The Rice concern, in common with most mail order rupture cures, decries the use of the truss and gives the impression that what they have to sell is something



entirely different. However, the device is essentially a band of webbing with a pad and understrap. Like most mail order "rupture cures," the Rice device has a "patent medicine" adjunct—"Developing Lymphol." It is claimed, either inferentially or directly, that Lymphol will repair the break in the abdominal wall and thus permanently cure the rupture. Lymphol was analyzed and found to be an alcoholic solution containing essential oils, capsicum and resin, colored red. (*Jour. A. M. A.*, April 9, 1927, p. 1199).

**THE ASSIMILATION OF IRON.**—Investigations have been published, which the investigators believe to indicate that vitamin E is a substance specifically related to iron assimilation in a manner comparable to the relation of vitamin D to phosphorus and calicum metabolism. On this basis the use of ferric citrate and a fat having the properties of wheat germ oil—a potent source of vitamin E—is suggested as a logical basis for the treatment of secondary anemias. Since liver is rich in iron and in vitamin E this may be an explanation for the reported value of liver in the treatment of pernicious anemia. (*Jour. A. M. A.*, April 23, 1927, p. 1323).

**THE SCARLET FEVER PATENTS.**—The Scarlet Fever Committee, established to control the use of the methods resulting from the discoveries of the Drs. Dick relating to scarlet fever, has thought it advisable to secure in Great Britain patents similar to those sought in this country for the protection of the manufacture and use of the methods and products. In view of alarm expressed in British medical publications, the Drs. Dick explain that they sought the most competent advice before embarking on the procedure. They reveal that they have not had and will not receive compensation personally from the patents; they have sought only to prevent the manufacture and sale of unworthy or inefficacious products in order that the public might be protected against commercial exploitation. (*Jour. A. M. A.*, April 23, 1927, p. 1324).

**THE CREOCO REMEDY CO.**—D. H. Brown, M.D., of Jacksonville and St. Augustine, Fla., is a negro quack who for years has been swindling consumptives. This man's particular piece of quackery has in the past gone under the name "Dr. Brown's New Consumption Remedy" and he made his appeal especially to those unfortunate members of his own race who were afflicted with tuberculosis. More than ten years ago Brown was prosecuted under the Federal Food and Drugs Act because he was crude enough to make claims on the trade package of his nostrum to the effect that it was a remedy for consumption, pneumonia, and all diseases of the lungs. Subsequently Brown ceased making fraudulent claims on the trade package, but continued to sell his worthless nostrum, making the same false and fraudulent claims in newspaper advertisements and circulars. In 1923 a fraud order was issued by the Post Office Department against D. H. Brown and his concern known as the Magnolia Remedy Co. Then Brown attempted to continue the business by creating the Creoco Remedy Co., selling the same preparation under the name of this company, and calling the preparation "Creoco." Now a supplemental fraud order against the Creoco Remedy Co. has been issued. (*Jour. A. M. A.*, April 23, 1927, p. 1340).

**INTERNATIONAL HEALTH INSTITUTE.**—During the past few months the medical profession has been flooded with letters from the "International Health Institute, Inc.," 2061 Broadway, New York City. According to its "sales talk," the International Health Institute purposes to sell to the public a urinalysis and periodic physical examination service "supplemented with a complete course in body-building and rules of right living." While this is the nominal *raison d'être* of the concern, evidence is accumulating to confirm the suspicion that the International Health Institute, Inc., is primarily a promotion scheme. Letters are sent to physicians stating that the "Institute" desires to establish "a resident physician and member of our Advisory and Hygiene Reference Board"; invites the physician to join and to purchase stock. It is stated that the first source of income is the service that is to be recommended by the International Health Insti-

tute in selling to the public a periodic physical examination and urinalysis, for which the institute will charge \$37.50, but it is explained that a greater opportunity for financial betterment will come from the activities of the International Health Institute in recommending to the lay subscribers that they use certain health foods; certain "approved exercising devices"; certain "hygienic appliances"; and certain books, all of which the Institute will sell. (*Jour. A. M. A.*, April 30, 1927, p. 1435).

**"IODEX" IN THYROID DISTURBANCES.**—A pamphlet published by the Pharmacal Advance Press, the house organ of Menley and James, Ltd., the firm that sells Iodex is devoted to promoting the use of iodex ointment in the treatment of systemic goiter by rubbing ointment into the skin over the thyroid gland twice a day, and also recommending iodex ointment for a number of other pathologic conditions. The Council on Pharmacy and Chemistry has reported that the preparation was practically devoid of free iodine, that its composition was incorrectly stated, that the total iodine content was only about three-fifths of the total amount of iodine claimed, and that therefore its use for securing iodine effects is unwarranted. Almost any intelligent physician knows that the attempt to treat systemic goiter by rubbing such an ointment into the skin over the goiter is preposterous. However, this is but one of many ridiculous statements in the pamphlet mentioned. (*Jour. A. M. A.*, April 30, 1927, p. 1438).

**URISEPTIN.**—An examination of uriseptin made in the A. M. A. Chemical Laboratory was published in 1908. The report brought out that while uriseptin was claimed to contain formaldehyde combined with lithium in the presence of a concentrated extract of corn silk and couch grass, the examination showed that uriseptin was marketed under a deliberately false claim, in that it did not contain the lithium formaldehyde compound, but instead contained hexamethylenamine (methenamine) as its chief constituent, and also lithium benzoate. (*Jour. A. M. A.*, April 30, 1927, p. 1438).

**WHAT IS AN ANTISEPTIC?**—While physicians understand that a germicide may produce effects on an infected area in a brief period which can be produced by an antiseptic only through prolonged contact, the general public understands these terms as synonymous. In consideration of this condition, the U. S. Bureau of Chemistry, which is charged with the enforcement of the Food and Drugs Act, has recently come to the conclusion that the term "antiseptic" when used in the labeling of a medicinal product is objectionable unless the preparation when used as directed will actually destroy micro-organisms. The medical profession will, of course, agree at once that the position taken by the Bureau of Chemistry is in the public interest. (*Jour. A. M. A.*, April 30, 1927, p. 1420).

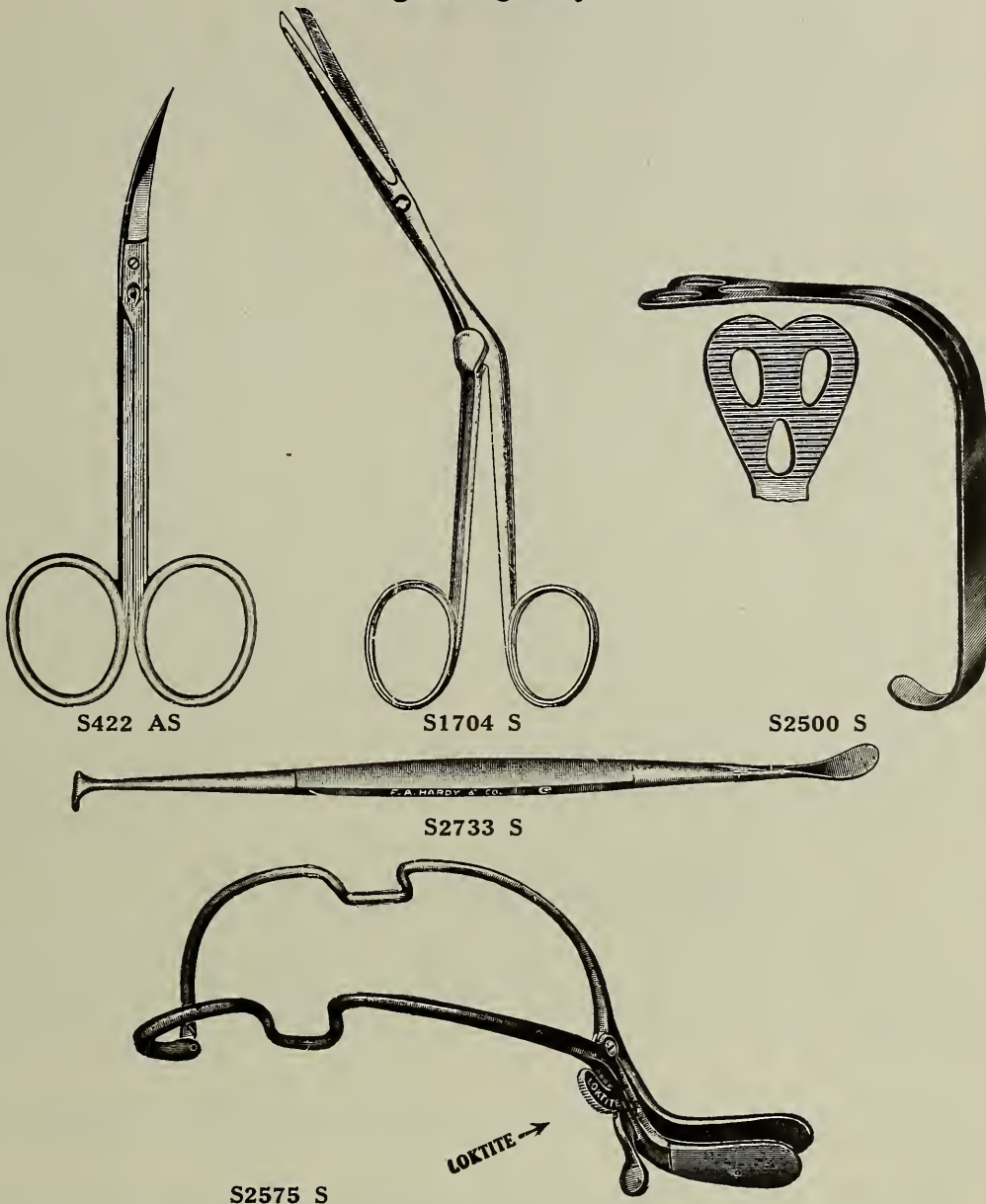
## BOOK REVIEWS

**DISEASES OF THE SKIN.** By Oliver S. Ormsby, M.D., Clinical Professor and Chairman of the Department of Dermatology, Rush Medical College of University of Chicago, etc. Third Edition, Thoroughly Revised. Illustrated with 521 Engravings and Three Colored Plates. Cloth. Price \$11.00. Lea & Febiger, Philadelphia, 1927.

We have had occasion to commend to the medical profession former editions of this excellent work which is a comprehensive treatise by a well-known author, teacher and clinician. The present edition is brought up to date by the addition of much new material, including a description of thirty new diseases. Many of the chapters have been reconstructed in order to meet present ideas concerning etiology, pathology and treatment. As in former editions the classification is as follows: hyperemias and inflammations; hemorrhages, hypertrophies, atrophies, pigment anomalies, new growths, neuroses, parasytic affections, diseases of the appendages. The book is well illustrated. Undoubtedly it will meet with widespread favor and deservedly so.

(Continued on Adv. xx)

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## BOOK REVIEWS

(Continued from Page 246)

**DISEASES OF INFANTS AND CHILDREN.** By J. P. Crozer Griffith, M.D., Ph.D., Professor of Pediatrics, Graduate School of Medicine, University of Pennsylvania; and A. Graeme Mitchell, M.D., Professor of Pediatrics, College of Medicine, University of Cincinnati. Second Edition, Reset. Two Octavo Volumes Totaling 1,715 Pages with 461 Illustration. Cloth, Price \$20.00. W. B. Saunders Co., 1927.

This work, in two volumes, is an elaboration of the first edition, and is a reasonably complete review of the subject of pediatrics. While it is not encyclopedic yet it is very comprehensive and in every way a trustworthy and authoritative work. A most commendable feature is the extensive reference to pediatric literature of this country as well as Europe, though the authors have embodied the results of their own wide experience in the diagnosis and treatment of diseases of children. The first volume is devoted to general subjects, including physiology, hygiene, breast feeding, artificial feeding, diet, symptomatology and diagnosis, therapeutics, and two main divisions dealing with diseases of the newborn, infectious diseases, and general nutritional and miscellaneous diseases. The second volume is devoted to diseases of the digestive, respiratory, circulatory, genitourinary, and nervous systems, diseases of the muscles, bones, joints, blood, spleen, lymphatic glands, ductless glands of internal secretion, skin, eye and ear. It is difficult if not impossible to select any one feature of these two volumes that stands out as pre-eminent in value, and for the reason that the whole work from beginning to end is so comprehensive and thoroughly trustworthy as to justify a hearty approval of it. It deserves a place in the library of every practicing physician.

**CONQUEST OF DISEASE.** By Thurman B. Rice, M.D., Assistant Professor of Sanitary Science, Indiana University School of Medicine. Cloth. Price \$4.50. The Macmillan Company, New York, 1927.

This is a very interesting and well told story covering the advances that medical science has made in its conquest of disease. It is a narrative that holds interest because it is told in non-technical language and conveys the most recent scientific information concerning the transmissible diseases, and points out the possibilities of controlling or perhaps ultimately eradicating most of the transmissible diseases that occur today to produce discomfort, ill health and economic loss to the people. Above everything else the author has succeeded in telling in understandable language the history of the scientific achievements that have been such a glory to the medical profession. After an introduction in which the author speaks of the old days when dirt, disease, ignorance and pestilence held sway, and what astounding progress has been made in the control of the various infectious or transmissible diseases, the subject of prevention is discussed under the headings, Disease Spread by Intestinal Discharges, Saliva-born Diseases, the Insect-born Diseases, and Diseases Transmitted to or Through the Skin or Mucous Membrane, known as the Contact Diseases. The final chapter discusses a means by which transmissible diseases are controlled, and this includes segregation, isolation, quarantine, fumigation, disinfection and other regulations pertaining to public health work. Aside from being exceedingly interesting, the information is authoritative and will go a long way toward giving the public an intelligent idea of what has been accomplished in a scientific way in the control of diseases. To Indiana men an interesting feature of the book is that its author is an Indiana man and the work has been dedicated to the late John N. Hurty, M.D., who was state health commissioner of Indiana for more than twenty-five years.

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## ORIGINAL ARTICLES

### SOME OF THE MORE FAVORABLE FEATURES OF HEART DISEASE

JAMES B. HERRICK, M.D.  
CHICAGO

To the popular conception of few other conditions except that of carcinoma and perhaps of syphilis does the notion of gravity, incurability, relentless progress toward an early death cling so persistently as to heart disease. Many people, some of them physicians, believe there is no such thing as a mild form of heart disease. To them any affection of the heart is serious, if not in the immediate future yet, potentially, at some more remote period.

This belief has arisen largely through tradition. The ancients, viewing the heart as the center of the human organism, looked upon it as in a sense immune to ordinary disease. There was a divinity that hedged it about, that protected it. When this guard was broken through and the most important organ of the body was affected by some infirmity it implied ruin to the whole structure.

Then there is the dramatic rise of cardiovascular disease to the unenviable position at the head of the mortality list. This has caused a shudder of dread to go through the lay and professional public. The impression prevails also, that comparatively little can be done to ward off or check the progress of heart disease. With the advent of physical diagnosis and the stress laid upon the murmur as evidence of damage the notion became general that murmur, valvular disease, irremediable mechanical defect were synonyms, that they spelled certain progress toward a breakdown and death. Nor have the later notions of angina pectoris and bacterial disease of the heart made the outlook more rosy or optimistic.

It would be easy to show that these gloomy notions are only partially warranted by facts. Easy to show that much may be accomplished in the way of preventing heart diseases or of preventing cardiac breakdown; that many of those whose hearts are temporarily unfitted for work may by proper treatment and by readjustment of living conditions be rehabilitated and restored to a condition

of efficiency and usefulness only a little below the normal. This sombre view of heart disease is also brightened by the fact that there are cardiac conditions that are not serious or are only mildly so. I wish to discuss some of these milder types of heart disease and the attitude and duty of medical men toward them. This is a question that concerns not alone the general practitioner but as well the internist as a specialist and even the surgeons, for all are called upon at times to see these patients and to express opinions as to the state of the heart.

Physicians are often responsible for these pessimistic notions regarding the heart, because of two errors that they are liable to make.

The first error has to do with the art rather than the science of medicine. It concerns the question of *how* we examine for heart disease and *how* we tell a patient of the result of our examination. It may seem elementary and unworthy of notice, but I think not. The doctor may sow the seed of fear of heart disease. He may do it by a shrug of the shoulder, an "I could an if I would" air. When I was an intern and ill, a kindly, skillful doctor as he listened to my heart, shook his head with a questioning air and said: "Let me listen to that second sound again." He seemed perplexed or mystified as I thought, by something he heard. He parried my question as to what he heard and what it meant by saying: "Oh, I am sure it is all right." It was all right. But in my mind for years after, that possible altered second tone came to the front every time my heart gave a kick or beat rapidly under excitement, every time I had an ache or pain anywhere within a foot of my sternum.

Comments on slight irregularities, faint murmurs or other alterations of tone, or on trifling alterations in the size of the heart should generally be withheld entirely or made with the most extreme caution, otherwise an impressionable child may be made more self-conscious or a nervous mother more apprehensive and overcareful. We have all been guilty of this sin. Many phobias have started in this manner, many neurotic individuals have been made more neurotic and some have had not only their happiness lessened but have had their activities greatly curtailed because



of fear of harm that will come to a supposedly weak heart by even slight exertion. Many of these sins are to be laid at the door of the general practitioner, but fully as many to the specialist.

In telling a patient of the existence of an organic heart disease, such as valvular disease, myocarditis, or even angina pectoris, not only honesty but much tact is necessary. Emerson has said: "It is not the fact that imports but the effect of the impression of the fact on your mind." Merely to say, "you have heart disease," often means to the patient, "you are doomed shortly to die." A statement of fact has been made. A false impression has been conveyed. There is here an unintentional dishonesty that is as bad as though in the hope of doing the patient good the doctor has flatly said, "you have no heart disease." Tact, an explanation of the existing condition with the directions necessary to insure as great a degree of comfort and length of life as possible, as hopeful an outlook as can conscientiously be offered will, if sympathetically tendered, lead to a proper mode of living and a minimum of fear. Different patients must be told in different ways. The intelligent man is treated as I have outlined. The more ignorant one who would not understand explanations is ordered, perhaps dogmatically, to do as told. Danger is minimized and fears allayed.

The bluff general practitioner who knows his patients often handles them far better than the specialist who may be more learned. Several years ago I was called in consultation to see a woman whose illness was clearly a threatening acute appendicitis. I flattered myself I had cleared up the doctor's doubts and set him right. He then agreed with me that immediate operation was imperative. But all my patient—perhaps wearisome is the better word—efforts to gain the consent of the rather ignorant Yiddish woman to an immediate operation, all my explanations and arguments were of no avail. She stubbornly refused to be convinced. I was fighting a losing game when the doctor who had been the family adviser for a long time, said to her: "See here, it is dis vay. You god acute appendicitis. Ven you vait, may be iss too late! It busts! Den it iss pst!"—with a heavenward gesture of the hand and eye—"good bye, Mary! So you got to go in de hospital tonight and haf it out." She consented at once. I think I knew more of appendicitis than he did but he certainly knew better than I how to handle that patient. I had the knowledge, but he had the technic.

Recently I ran across two statements that fairly well illustrate the diametrically opposed practice of many physicians regarding serious heart disease. In a meeting of a state medical society in 1922, a well-known physician from a large city is reported to have said concerning angina pectoris: "My own method for years has been to tell these patients plainly that they may die suddenly,

to make their wills, and have no further responsibility requiring anything of that kind, so that no unusual loss will fall upon their families." Another physician, likewise from a large city, in a state medical meeting in 1919, said: "I make a practice of telling my patients frankly, lying cheerfully, that they are going to get better, minimizing the gravity of the disease."

I do not believe either one of these doctors talks to his patients exactly as he is reported. If he does he is practicing poor technic. He is conveying wrong impressions. In the one case he gives an impression of hopelessness with death certain in the near future. In spite of the gravity of angina pectoris the prognosis is by no means as bad as this. The depressing effect on the patient may be harmful. In the other case he holds out an unwarranted hope. If the patient lives for months or years as he may, but does not get better as he was promised, he realizes that deception was practiced, loses confidence in his physician, in all physicians perhaps, and is made mentally if not bodily worse.

What I have considered thus far are merely matters of technic though of no mean importance. They assume that the nature of the heart symptoms is understood. In other cases, however, the fault is not so much one of technic as it is of knowledge. It is a mistake in regarding as serious what is really trivial. It is an indiscriminate placing of the label "heart disease" with all the ominous meaning attached to that term upon symptoms that are mild, largely negligible, perhaps not cardiac at all. How does it happen that this error is committed? For it is an error, is not an uncommon one and one often fraught with unfortunate consequences.

I was deeply impressed a few weeks ago in listening to a paper by Edouard Rist of the Pasteur Institute on "Pitfalls in the Diagnosis of Tuberculosis." He had studied the subject in France and found that in a large series of cases called tuberculosis of the lungs a wrong diagnosis had been made in about thirty per cent. He cited similar figures from England. Friedrich von Mueller, who heard him, said that the same was true in Germany. This was appalling. Out of every one thousand diagnoses of tuberculosis, three hundred were mistakes. Three hundred individuals branded as sources of contagion, many ostracised, sent to sanatoria, compelled to give up occupation, to forego marriage. All the sacrifices and inconveniences that go with the diagnosis of tuberculosis!

How did it happen? Rist cited many kinds of errors. Mixing of specimens of sputum, clerical errors, faulty laboratory technic, wrong interpretation of stained specimen, faulty x-ray plates or faulty interpretations of the same, haste, ignorance on the part of the examiner, etc., etc. But I am sure a cause that was operative was the fact

that the doctor felt himself under the urge of making an early diagnosis to the end that the patient might have a good chance in his fight against this disease. Early detection—it has been written about and talked about for years—means a good prospect for recovery. The doctor without waiting for the more decisive tests of tubercle bacilli in the sputum or indubitable x-ray findings might conclude that the rapid pulse, malaise, anemia and hacking cough, or the few rales with a little rise in temperature and a loss in weight meant tuberculosis and so diagnose.

Tuberculosis and heart disease are not the same either in etiology or methods of diagnosis. There is no crucial test in the case of heart disease comparable to the finality of the detection of tubercle bacilli in sputum. The x-ray is much more decisive in its judgment in tuberculosis than in heart disease. But there is much the same danger of doing harm by a wrong diagnosis in heart disease as in tuberculosis, with consequences nearly as disastrous. Much the same reasons for faulty diagnosis exist. Ignorance, of course, is a fruitful cause. Haste or carelessness another. Over-emphasis on heart rate, regularity of rhythm, size of heart, heart murmur, x-ray pictures, etc., may be the cause, the doctor having in his mind too fixed an idea as to what is normal. But I believe the mistakes are largely due to the doctor's dread of passing up a real organic disease as negligible, his desire, in other words—an altogether praiseworthy one—to do the right thing by his patient and to do it now when it is not too late.

What are some of these milder conditions in which mistakes are especially prone to occur?

There is a group of heart cases that—to make an Irish bull—are not heart cases at all. The patients wish to know whether they have heart disease; or they think they have heart disease when they have not. A man comes in for a thorough examination, perhaps a periodic examination including naturally an examination of the heart. Or he wishes to know especially about his heart because of a family tendency to heart disease, or because his attention has been attracted to his heart by some unusual sensation in his left chest or because some friend or neighbor has lately died of heart disease. He is relieved of anxiety if the doctor examines him carefully and can assure him that conditions are normal. If, on the contrary, the doctor hesitates in expressing an opinion, manifests doubt as to the existence of a murmur or the size of the heart or its rate, comments on a slight change in blood pressure, harm is apt to come, for this individual's mind is in a receptive mood and the seed of doubt finds fertile soil and will rapidly develop into a flourishing fear—a vigorous phobia.

A patient with a fixed conviction that he has heart disease is another who needs most thorough examination, careful explanation, repeated reas-

urance. His nerves and mind need the treatment rather than the heart.

No group is harder to handle than that of the so-called irritable heart, neurocirculatory asthenia, the D. A. H. of the British, the form so prevalent during the war. Treatment is here to be directed largely to the mind. Readjustment as to home surroundings, school conditions, occupation may help. Encouragement, training in learning to do things alone and not by the help of a fond parent, or by drugs may be of service. Each case is a study in practical psychology.

The diagnosis is by no means easy with the complaint of precordial distress or pain, of tachycardia and palpitation, of dyspnea and weakness. Only by careful exclusion of the signs of change in the size of the heart, by absence of murmur, altered second tones and irregularities does one conclude that organic disease is absent. Also cyanosis is lacking. The dyspnea is really an occasional sighing respiration rather than difficult breathing. Physical exertion as in the hopping test shows that the heart quickly comes back to its old rate and that true dyspnea does not result from the exercise.

Similarly tuberculosis, exophthalmic goitre and other cause for the irritable heart are excluded.

These cases are at times hard to diagnose, harder to handle but patience and thoroughness will usually be rewarded by a certainty of diagnosis that is the first requisite of a successful treatment.

Another simple condition that is not infrequently misinterpreted is the respiratory arrhythmia that is seen so often in children. This is really a sinus arrhythmia where through the influence of the vagus which in turn is influenced by the act of breathing there is an alternate slowing and hastening of the heart's rate. Where this is marked the difference between the slow and rapid rate may be so great as to lead the doctor to fear some myocardial or other grave lesion producing auricular fibrillation. I have an electrocardiogram of a marked respiratory arrhythmia in an adult—it sometimes occurs in adults, not so infrequently in the aged—in which the heart at its rapid rate is beating 94 to the minute, while its slower rate is 53.4. This was for a time regarded as auricular fibrillation.

In these cases a little more prolonged observation will show that the rapid rate is during inspiration. During expiration the heart slows. This rhythmic arrhythmia, if I may use such an expression, varying with the act of respiration is a normal phenomenon and need excite no comment. It needs no treatment.

I mention it for this reason. When I first read the denunciatory words of Mackenzie and Wenckebach inveighing against physicians who called this condition a disease and treated it as such I thought they were unnecessarily harsh, that such



mistakes were of extreme rarity. But since then I have come in contact with several cases where physicians unaware of the physiologic character of this cardiorespiratory phenomenon have curtailed the activity of children, prescribed digitalis and in one instance even kept a child in bed for three months with the daily application of the ice bag to the precordia. This explains the wrath of a Mackenzie, perhaps. But in extenuation of the error it may be urged that there are instances where one must study the heart's action with considerable care before concluding that the heart is normal and the irregularity quite innocuous.

Another occasional stumbling block is the extrasystole or premature beat. It will be recalled that the normal heart beat originates in the sinoauricular node, a small mass of specialized tissue situated in the right auricle close to the region where the superior vena cava joins the auricle. This is the pacemaker. At times, however, the regularity of the pace is disturbed by a beat originating in a spot other than the node, in the auricle perhaps, or the ventricle or in the tissue joining the auricle and ventricle. This beat is therefore ectopic. The heart's rhythm is interrupted for the beat comes in ahead of time and it commonly heads off the normal beat that starts a little later in the sinus node, comes down to the auricular or ventricular tissue as the case may be, finds it contracting or in a refractory state and so produces no perceptible clinical effect, though it may show in the electrocardiogram. The clinical features of extrasystole are well known. The extrasystolic beat is premature and is followed by a long pause. It may occur so early in diastole that the ventricle has not had time to fill with blood, so that there is not enough blood to lift the aortic curtains when the left ventricle contracts. The result is a loss of pulse at the wrist and a failure to hear the second heart sound on auscultation. The pulse is the intermittent pulse of the older writers, a beat falling out entirely. At times a feeble second pulse is felt at the wrist and where this phenomenon is often repeated a bigeminal pulse is usually spoken of.

What I wish to call attention to is the fact that a large percentage of these cases of extrasystole is harmless, not all but a large percentage. In itself extrasystole is not dangerous. It may be extremely annoying and when the patient is conscious of the "skip of the heart" he may be quite unnerved by the uncomfortable sensation in his chest, "the gone feeling in the throat." In most instances the physician may speak reassuringly for the cause is often toxic—tobacco, alcohol, tea, coffee, constipation, focal infection, fatigue, digitalis, or it is neurotic—worry, anxiety, insomnia, or a mixture of these, i. e. a toxic-neurotic cause. Removal of the cause and encouragement cure the patient—less tobacco, a short vacation, a cleaning up of bad teeth, a few nights' sleep, a dose or two

of calomel and a regulation of diet. Small doses of digitalis are at times helpful. Great harm has frequently come from the fact that the doctor has viewed the skipped beat as warranting extreme caution as to exertion, and has added to the apprehension of the patient, thereby aggravating the nervous cardiac phenomenon.

Now all this sounds easy but I must add that while, as many have insisted, extrasystole *per se* is not harmful and is usually negligible it is a phenomenon that must not be passed by too lightly. I have learned to have a wholesome respect for extrasystole, especially for one that appears in those of adult years, or on exertion. The toxic and neurotic type is prone to disappear on exertion or when the heart rate is increased as by fever. But where there is genuine organic disease in the myocardium extrasystole may be one of the first manifestations of such a change. Other evidence of organic disease should be sought, e. g., increase in the size of the heart, altered blood pressure, murmurs, or impurities of first or second heart tones, dyspnea, cyanosis, heart pain. Occasionally several extrasystoles may occur in rapid succession as a little run of tachycardia or there may be a short spurt of complete irregularity, i. e., auricular fibrillation. Such phenomena must be regarded more seriously and investigated carefully before one declares the innocence of the extrasystole.

Much the same may be said regarding paroxysmal tachycardia. Here the extrasystoles occur in rapid succession, perhaps 180-200 to the minute, the attack beginning and ending suddenly and lasting from a few seconds to a few days. The patient is often greatly alarmed. Only rarely, however, do we see cardiac failure with really serious consequences. Reassurance from the physician will go a long way toward carrying a patient through such an attack and leaving him psychically undisturbed thereafter. I must add, as I did regarding the solitary extrasystoles, that occasionally these paroxysms are one manifestation of changes in the myocardium such as fibrosis. Therefore, they should not always be too lightly dismissed.

And now comes the question of the heart murmur. In spite of much writing in the last fifty years regarding "functional", "hemic", "accidental" murmurs, in spite of statements oft repeated during the examination of soldiers in the Great War there still remains a widespread tendency to regard an endocardial murmur heard under any circumstances as indicating organic, i. e. valvular disease. The patient or if a child, the parent, is warned against the possible or probable dangers of over-activity and too often digitalis is prescribed with no indication whatever except the supposed indication offered by the murmur. The harm wrought by this misinterpretation of the

significance and gravity of the endocardial murmur has so impressed Sir Thomas Lewis that he has said: "Had systolic murmur and modifications of the heart sounds never been discovered, the practice of medicine would have stood on a much higher plane than it does today." The statement is an extreme one, but there is a great deal of truth back of it.

It is hard to give rules for guidance here. Experience, though fallacious, helps. What in the judgment of one is an innocent little systolic whiff at the apex of a child's heart or of a nervous adult's rapidly beating heart, to another one who has been brought up in the belief that a murmur is a murmur and irrespective of quality or intensity means a diseased valve, it sounds a note of warning, and is regarded as the first indication of a disease that is doomed to advance unless the greatest precaution is exercised. The great harm done by a wrong diagnosis of organic disease in these cases warrants the emphasis laid upon the necessity of being sure of one's ground before declaring a patient the victim of valvular disease. While the safer way is to throw the burden of proof on the one who declares an endocardial murmur to be insignificant, i. e. to assume an organic origin for such a murmur, we must be prepared to ignore a systolic murmur at the apex when there is no history of rheumatism, no enlargement of the heart, no altered pulmonic tone, no irregularity, no cyanosis or dyspnea. And particularly is this true when the murmur is heard only when the heart is rapid or only in certain phases of respiration or only in connection with fever or anemia or when the patient is rundown. Doubtful cases may be re-examined. Furthermore are we not often inclined to be too pessimistic regarding many lesions known to be organic? A slight mitral leak, a trifling aortic leak, a systolic blow at the base that we are sure means roughened aortic valves and a roughened aortic wall. These lesions are not to be neglected, but their gravity should not be magnified beyond reason. We should not become panicky ourselves or cause our patients to become panicky over such a state of the heart or aorta any more than we do when in the adult we find a trace of albumen in the urine, a blood pressure of one hundred fifty, a few rales of a chronic bronchitis, or a prostate that is larger than the owner would like to have it. A heart whose muscle is efficient as shown by the ability of the organ to meet easily and naturally all ordinary demands that are placed upon it is a heart that need rarely cause us worry though there may be a murmur or other trivial departure from the condition that has—largely artificially—long been regarded as normal.

I am pleading for more care in the diagnosis of heart disease and especially that we should recognize a group of mild cases with heart symptoms or findings that are not to be viewed with alarm.

We should use tact in our examination, tact in our treatment of the disease and in our treatment of the patient. If we do this we shall cure many cases of supposed heart disease and shall prevent much anxiety, mental suffering and invalidism in our patients.

#### GYNECOLOGICAL AND OBSTETRICAL TUBERCULOSIS\*

V. A. FUNK, M. D.

VINCENNES

There is no doubt but that tuberculosis was recognized several hundred years B. C. We find that Hippocrates, about 460 B. C., gave a rather definite and fairly vivid description of it; and about 30 B. C. Celsus describes three different varieties, the atrophic, the cachetic and ulcerative. Hippocrates refers to it as the most dangerous disease, and one that proves fatal to the greatest number. Aristotle believed that tuberculosis was contagious. Galen considered it to be an ulcerative condition, and was the first to recommend that its sufferers should live in high altitudes. Moses surely had a practical knowledge of tuberculosis when he said to the children of Israel, "I will even appoint over you terror, consumption, and burning ague, that shall consume the eyes, etc.", and, again, he threatens them, "The Lord shall smite thee with consumption," etc. Sylvius in 1695 was the first to indicate any connection between tubercular nodes and pulmonary phthisis. Morgagnin in 1771 was the first to regard the disease as infectious, and taught that it was dangerous to perform autopsies upon tuberculous subjects. Stack in 1785 gave the first accurate description of miliary tuberculosis, and up until 1800, phthisis was thought to be anteceded by scrofulous glands. The disease was not recognized in any other organs but the lungs until about 1793, by Baillie. Laennec in 1819 described the pathology and physical signs of the various stages of the disease, and was the originator of the stethoscope, by means of which his more accurate auscultatory findings were made possible. Klencke in 1843 made the first successful inoculation of a rabbit with tuberculosis by an intravenous injection. Between this date and 1882 when the bacillus was discovered by Koch, various opinions as to its etiology were promulgated. Baron attributed it to hydatids; Furnival, to deficient enervation; Engel claimed the disease to be similar to typhoid, but caused by a different exudate. Simon, in 1850, advanced the theory of its being due to a specific infection which inspired the successful investigations of Friedelander, followed by Koch.

Genital tuberculosis was first recognized by Morgagnii. While doing an autopsy on a twenty-year-old girl, who died of tubercular peritonitis,

\*Presented before Davies-Martin County Medical Society.



he found the uterus and appendix filled with caseous material, and considered these organs to be the primary focus of the disease. Very little was said, however, concerning tuberculosis infection of the female genital organs until after Koch's discovery of the bacillus made it possible to positively diagnose the condition in all its stages.

Primary genital tuberculosis may be contracted in a number of ways. A douch nozzle may become infected by sputum or other infected material from a phthisical patient. Tubercular men, even though there is no infection of the genito urinary tract, may transmit the bacilli in the spermatic fluid, and although the epithelial lining of the vagina is a first class barrier, and the uterine and vaginal secretions quite a hindrance to their existence, however, Vernenil has found several cases recorded in which the female was infected in this way. Derville reports eight cases of salpingitis which were thought to have been transmitted by coitus. Septic instrumentation must be regarded as a source of infection, hence, the rigid sterilization of examining specula, forceps, and fingers, and by all means the obstetrician and his instruments, used from one patient to the other where inroads are so frequently opened up for the bacilli infection, by the lacerations. Dressings applied to the vaginal abrasions also must not be overlooked.

When two tubercular foci are discovered it is sometimes very difficult to decide which is the primary. The one most pronounced and most active may be the secondary lesion. Most authors claim that from sixty to twenty per cent of all genital tuberculosis is of primary origin, the remaining eighty to ninety-five per cent being a secondary infection from some distant focus. This estimation, however, is as to any degree of accuracy, extremely difficult of determination.

The frequency of genital tuberculosis is much greater in the female than in the male. According to Amann, the female genitalia is involved in about twenty per cent, while in the male about three year cent.

In the laboratory of the University of Pennsylvania, where all specimen are subjected to a routine histologic examination, it is found that seven per cent of all inflammatory fallopian tubes removed are tuberculous. Infection of external genital organs is of less frequency than all the rest of the genital tract, there being only two cases in over 6,000 gynecological specimens examined at the University of Pennsylvania hospital.

The vulvar lesion closely resembles tuberculosis of the skin of other parts of the body, but sometimes modified by local uncleanness, as moisture, discharge, heat, friction, and the presence of the special glands. Bender describes two forms—the ulcerative and hypertrophic, the ulcerative being the most frequent, and, as in the male, not infrequently there is a history of a previous

injury, usually not severe, especially if the patient is suffering from the disease elsewhere. The onset is slow but progressive. We may have an ulcer at first, or a preceding tumor, pain and discharge when ulceration begins, with more or less pruritus. In the hypertrophic variety there may be only a discomfort from the enlargement of the parts. As a rule these ulcers do not bleed very readily to the touch, differing in this respect from malignant ulcers. They are usually covered with a layer of necrotic tissue and show no tendency to heal. Contact ulcers may be formed on the opposite side. The ulcers may extend in any direction over the adjacent skin surfaces or into the vagina, forming fistulas into the neighboring hollow viscus. These lesions may always be confused with malignancy and lues, therefore a microscopical report is the only positive diagnosis.

The first case of tuberculosis of the cervix was reported by Vircham in 1853. It is a very rare infection—no age is immune, but it is most frequently met with in active sexual life. A discharge, some bleeding, and occasionally some pain and itching, constitute the symptom complex.

Pozzi described three varieties the ulcerative, the vegetative and miliary. The ulcers may be small, resembling a chancroid, or large, involving the whole cervix and extending onto the vaginal mucosa. These are usually moderately deep, presenting roughened undermining edges. The surface is usually covered with necrotic material, or has a granular appearance. As to its differentiation from cancer: the course of the disease is very much slower than cancer, the edges are never elevated and indurated, the floor is soft, rather than the hard, nodular cancerous growth, the surface does not bleed so easily to touch, and there is a difference in the appearance of the necrotic tissue found on the surface. The microscope will always settle any doubt. It has frequently been taken for sarcoma and carcinoma and vice versa, to the consternation of both patient and physician. The other two varieties are seldom seen or diagnosed until ulceration has developed, therefore are of little consequence.

Tuberculosis of the uterus is the second most frequent site of all genital tuberculosis. The endometrium being the usual site of infection, it is practically always secondary to a focus elsewhere, this being invariably located in the fallopian tubes.

Norris of the University of Pennsylvania has never seen a case of tuberculous endometritis without a concomitant infection of the tubes.

The symptoms resultant from a tubercular endometritis are generally more or less masked by those produced by the accompanying salpingitis. Pain, tenderness over the uterus with a leucorrheal discharge, moderately profuse at first, then later becoming purulent, with perhaps an occasional

cheesy particle constitutes the major symptoms. There is nearly always a dysmenorrhea which begins two or three weeks before the flow. A positive diagnosis is practically impossible unless the bacilli are demonstrated in the discharge, or histologically from tissue curettings.

The fallopian tubes are involved rather frequently, but the ovaries relatively infrequent. The two organs are of such close proximity, however, that they must be symptomatically considered together.

It is usually a secondary infection from the following locations, the lungs, peritoneum, bones, lymph glands or intestines. Albrecht in a series of autopsies found the primary source of tubal and ovarian infection as follows: Lungs 73 per cent, intestines 20 per cent, bones 4 per cent, peritoneum 2 per cent. Records of the postmortems of the Henry Phipps Institute show about 7 per cent of all tubercular females to have had the infection in the fallopian tubes. About 90 per cent of all genital tuberculosis is a tubal involvement and the Johns Hopkins hospital reports show that 10 per cent of all the salpingitis cases are of tubercular infection. When we consider the other ordinary infectious salpingitis cases, this rather upsets the old Niesserean ratio of 85 per cent of all infected tubes. I have always held that this was too high except for the slum clinics.

In practically every tubercular infection of the tubes, we find a perioophoritis due to the direct extension by continuity, and from infectious tubal contents exuding from the fimbriated extremities, which have a tendency to remain patulous, and constantly contaminate their surfaces. As a result we find retention cysts, and chronic hypertrophic inflammatory oyster-like ovaries. Bandelier thinks that the stagnation of the tubal secretions, the faulty blood supply, with frequent congestion, are important predisposing factors in the selectivity of the bacilli for the fallopian tubes, hence the reason for the statistics of Chaffey, Collingsworth, Cummins and others, showing the disease to be most prevalent in the active sexual life, although occurring at all ages from ten to fifty.

The symptoms of tubercular pelvic adenitis are by no means characteristic. We have pain, tenderness, menstrual disturbances, sterility, leucorrhea, constipation, gastric symptoms, local peritonitis, and a leukocytosis if there is a mixed infection present. Murphy claimed that unless a mixed infection is present, the tendency is for the tubal ostium to remain patent, and the course of the disease is similar to that of a recurrent appendicitis, but when the mixed infection has closed the tube, the recurrent type of symptoms disappear. The symptoms of the acute stage are those of any acute septic salpingitis. The duration of this stage is rather uncertain, but as a rule proves to last longer and is more resistant

to the routine palliative treatment, than are the infections produced by the ordinary pyogenic organisms.

The chronic stage is usually traceable to an acute attack, but frequently the disease is sub acute from the onset, and follows an almost chronic course from the beginning. Marked exacerbations are thought by some observers to occur only in the presence of mixed infections. The salpingitis is more often bilateral, with an invariable sterility even though one or both tubes remain patulous. On bimanual examination the tubes may be palpated on each side of the uterus, or the tubes, ovaries and uterus, as a pelvic mass, or there may be no palpable condition whatever, and only at the operating table will diagnosis be made by the macroscopical studded peritoneal surfaces. Tuberculin may be employed as an aid to diagnosis. Here we must ascertain if the reaction is due to a focus in some location outside of the pelvis. This test should not be made at or near the menstrual period.

The final outcome of these operated cases, after leaving the hospital, is less favorable than those due to other infections. Here we face a recurring pelvic infection and abscess formation, general peritonitis, secondary lesions of any of the other organs, and the acute miliary pulmonary infection. The great majority of fatalities, however, occur in the first year.

In reviewing the early literature of pregnancy, in the tuberculous, it is interesting to find that pregnancy was for many years believed to exert a favorable influence on the course of pulmonary tuberculosis. This is probably due to the tendency of the patient's weight to increase, which however, is generally only temporary, for a rapid advancement of the disease may occur after the fifth or sixth month, and very often soon after delivery. According to De Lee, when pregnancy occurs in the tuberculous woman, very frequently, even in those cases in which pregnancy ultimately exerts an unfavorable influence, no deleterious results occur, or at least become manifest, during the early months of gestation.

Observations lead us to believe that persons affected with tuberculosis are usually fruitful, and, that as a result of the disease, the sexual appetite is greatly increased. We know that sexual intercourse is often practiced by those in whom the disease is advanced, because of which we are confronted by therapeutic abortions. Simmonds reports a case in which a man had intercourse with his wife on the very day on which he died of advanced pulmonary tuberculosis.

The frequency of tubercular women becoming pregnant annually in the United States is estimated by Bacon at 32,000, and about eleven to twelve thousand of these patients die either during, or soon after the pregnancy. Morris believes



that 33 per cent of pregnant actively tubercular women die in less than one year following labor.

During pregnancy, a tuberculous woman is carrying a double load, and, as gestation advances, the drain upon her reserve becomes more and more marked. This is true, of course, of all chronic diseases but more especially is it true of tuberculosis. Exactly why pulmonary tuberculosis is so prone to exacerbation during pregnancy or immediately afterwards, is difficult to explain except upon the broad ground that pregnancy itself throws an added burden upon the general system, and that this may, in these cases, be enough to overthrow the balance of resistance on the part of the patient, just as a severe cold frequently breaks the resistance and phthisis begins. It is a significant fact which at present is not explained, that the Abderhalden test for early pregnancy gives a positive reaction in non-pregnant patients who are suffering from pulmonary tuberculosis. Evidently the disturbances in the blood caused by pregnancy are closely allied to those of phthisis. The straining at labor with its increased blood pressure is probably frequently sufficient to break down practically healed lesions, converting them into open or active ones. In this way many free bacilli are suddenly thrown into the blood stream, this accounting for many of the cases of miliary tuberculosis that have been reported as occurring at this period. The actual physiological exhaustion following a difficult labor must also be considered a contributing factor in many cases. Norris found virulent tubercle bacilli in the placenta of 5 per cent of his tubercular pregnancies. Some observers place the percentage as high as 40 per cent in women suffering from active lesions, therefore the contraction of the uterus, incident to labor, forcing the bacilli into the blood stream, adds another liability to acute metastatic infection elsewhere. We may also have had the lighting up of the pulmonary process beginning in the later months of pregnancy, only to have advanced to an active stage at the time of the puerperium has been reached.

The effect upon the child of the tuberculous mother has been a subject much discussed. There have been four undoubted cases of congenital tuberculosis reported in the literature. Although being extremely rare we must admit that it does occur. Norris believes that all children born of tuberculous mothers show a hypersusceptibility to the infection. Sergents believes that 68 per cent of children of phthisical mothers die very young. Pankow states that above 50 per cent of these infants die under one year of age. Bacon estimates that of the 10,000 children under five years of age who die annually in the United States of tuberculosis—75 per cent are born of tubercular mothers. However, we have all seen large healthy children, born of mothers in the last stages of the disease. Pulmonary tuberculosis seems to have no influence

on the course of pregnancy whatever. Shanta beetle and states that he has found it necessary in lies that tubercular women are especially ferocious of his cases to induce abortion two or three times in one year.

De Lee thinks a pulmonary lesion of the fulminating type predisposes to a premature interruption of the pregnancy. In these cases the cough, hemoptysis, fever, vomiting and infection of the placenta being perhaps the direct causes of the precipitation of the premature labor. It is generally conceded that lactation exerts an unfavorable influence on the course of pulmonary tuberculosis. Nearly all authors advise the child being immediately fed from the bottle, or by a wet nurse. Among the extremely ignorant, the bottle fed mortality is so high that the breast feeding is perhaps the least of the two evils. While the bacilli have been demonstrated in the mother's milk, the chief danger to the child seems to be due to accidental contamination from infected fingers, nipples and kissing.

What are we going to do with the tubercular pregnant women whom we see early? Norris believes that in the presence of an extensive lesion somewhat active, and, in a small active lesion, the uterus should be emptied at once. This also applies to a laryngeal involvement of any degree. The development of secondary tubercular lesions in parts of the body distant to the lungs, is also invariably an indication for this procedure. The complications of labor which confront us at all times in the non-tubercular patient, which sometimes advance to a therapeutic stage, should be watched with extreme vigilance in the tubercular woman, and not be allowed to advance too far, because it must be remembered that these women have less resistive powers, and, what would be borne by the normal patient might be sufficient to cause an exacerbation of a smoldering lesion. For this reason, intervention should be employed considerably earlier in the tubercular woman, for the ordinary puerperal complications, than in the normal woman. As a general rule the earlier the intervention the better the prognosis.

The most difficult point to determine is what to do when the lesion is in the quiescent state. We know that the woman runs an added risk to allow the pregnancy to continue, that intervention in the early months is the safest, and that the same procedure in the later months of gestation is of little value. The chief danger, therefore, is that the patient may do well until the sixth or eighth month when it is too late to do good by emptying the uterus. It is impossible to foretell which case will, and which will not do well, but it is by no means justifiable to advise the induction of abortion in every case. As a general rule, the longer the lesion has been inactive, the better the prognosis. In these cases the factor of greatest importance is whether or not the patient is in posi-

tion to obtain proper and thorough treatment throughout the puerperal period. Then if at any time before the fifth month, evidence of a laryngeal involvement or exacerbation of any sort arises, the safest plan is to advise an immediate termination of the pregnancy.

### ETHICS\*

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*Introduction*—Having heard discourses on my topic for this occasion that had a tendency to be tiresome and soporific and not laying the flattering unction to my soul that mine will be widely different from the common run of such discourses, I beg your permission to leave with you now while your minds are alert and receptive, three lines with no name signed but probably original with the editor, which I clipped from *American Medicine*; lines which will help you through the valleys and shadows which are bound to come into all lives and which, after all, are perhaps blessings in disguise, for "Springtime would be but gloomy weather if we had nothing else but spring." I feel sure that they will help you to see the rainbows through the rifts in the clouds that are sure to gather in the skies of all lives. Here they are:

"You have what you spend;  
And lose what you save;  
And you store up what you give away."

*Medical Ethics*—Ethics is the science of duty. Duty is that which one should do, or refrain from doing. Medical ethics is the science of the duty of doctors. Why ethics? Because, as is well known, man is oftentimes man's worst enemy. You recall the old saw, "Man's inhumanity to man makes countless thousands mourn." Man is still in the making, he is (with due apologies to our fundamentalist friends) still evolving.

Schopenhauer tells us that "Yonghahn relates that he saw in Java a plain, as far as the eye could reach, entirely covered with skeletons, and took it for a battlefield; they were, however, merely the skeletons of large turtles which come this way out of the sea to lay their eggs and are then attacked by wild dogs who, with their united strength, lay them on their backs, strip off the small shell from the stomach and devour them alive. But often then a tiger pounces upon the dogs. For this, then, these turtles are born. Thus, the will to live everywhere preys upon itself and in different forms is its own nourishment, 'till finally the human race, because it subdues all others, regards nature as a manufactory for its own use. Yet, even the human race reveals in itself with most terrible distinctness this conflict, this variance of the will with itself; and we find man is a wolf to man."

So also it has long been known, albeit to the relatively few, that man is a social animal and that his progress in large measure rests upon a basis of sentiment; that no man may be a law unto himself; that man's chief duty was to man; that his obligation was in proportion to his intelligence and education and varied with the nature and intimacy of his social contacts. Hence, ethical codes, laws, and principles are children of necessity—necessity, as appreciated by the better men. The medical code was established by the Greeks during the Athenian ascendancy. It originated within the profession and is exemplified in the Oath and Law of Hippocrates. In 1803 Percival's code was published. The "Code of Medical Ethics" was formulated and published by the American Medical Association in 1849 and later revised to its present form and the name changed to the "Principles of Medical Ethics." Naturally there are great differences between the Hippocratic code and our present principles but these differences are only such as are necessitated by the growth and development of science and civilization while the basic principles—duty, service to man—remain the same.

The aim of the Principles is to point the road we must take if we are to the fullest extent to "pay the debt of love we owe to all mankind, both rich and poor alike."

Sound sentiment and common sense are twin brothers. Closer kin much, than the materialistic champions of efficiency would have you believe. Sentiment won the battle of Waterloo and the World war. Sentiment abolished slavery. Sentiment sounded the death knell of German efficiency and yet, we are today witnessing in the world a recrudescence of materialism which is manifesting itself in medicine and all other walks of life. The opening paragraph of the "Principles of Medical Ethics" reads, "A profession has for its prime object the service it can render humanity; reward or financial gain should be a subordinate consideration. The practice of medicine is a profession. In choosing this profession an individual assumes an obligation to conduct himself in accordance with its ideals."

Science is the child of education. Art is the child of culture. The trouble with the world today is that most of us have been educated beyond our cultural capacity with the result that the great majority of the people are hedonists whose aim in life is pleasure of such character as is selfish, materialistic, and whose value may be expressed in money. Apropos to this statement allow me to quote the following:

"What ought to be the purpose of life and, accordingly, the purpose of education? The examination as to whether the knowledge of facts can furnish us with such purposes was our first task. It ended with the negative result of showing that the physical and psychological sciences cannot lead us to any decision as to purposes and ends.

\*A lecture given to the students of Indiana University School of Medicine, April, 1927.



But purposes and ends we must have. And therefore we turn away from the science of facts and ask advice of ethics." (Munsterberg: *Psychology of the Teacher*, page 34).

Painful though it may be, candor compels the confession that the baneful effect of this hedonistic tendency is markedly manifest in medicine today. Science has brought the world in close physical communion through railroads, airships, wireless, etc., etc. What we most need now is men of culture to bring us in close spiritual communion through intelligent understanding. We cry for tolerance when what we really want and need is intelligence and good will. We have bridged the rivers and streams with steel, but it will require artists, craftsmen who know the value of truth and beauty, to build bridges which will enable us to cross the chasms of prejudice, the streams of selfish greed, the gulfs of intolerance, and the quagmires of creed and dogma; and the material necessary to build these bridges is intelligence for the foundation and human sympathy for the superstructure. The scientist's aim is the discovery of facts. The artist's aim is to apply those facts to the creation of beauty, i. e., joy, happiness. A professional man is, therefore, both a scientist and an artist—or a quack.

The functions of the medical profession are, therefore, manifold—economic, scientific, artistic, social and intellectual. It should be to the world what J. K. Hart says the Danish folk high school is to Denmark, "The germinating plot where the seeds of life are sown in warm soils and the new crop is protected during its early months and welcomed into the sunlight and freedom of the community. Here, the old and the new coalesce and grow together—in the mystery of this laboratory of nature—to become existent reality, and to promise the new realities of tomorrow." The object of the "Principles" of ethics is to teach the doctor what his paramount aim should be, how to achieve it, and how to measure his success.

To me, next to the joy one gets from the self-consciousness that he has done good work, the greatest reward he can reap is the esteem of his fellow craftsmen. A recent article in *American Medicine* said, in part: "The real reward in medicine is not in dollars and cents. The ethics of the profession of medicine preclude a large financial reward, that is, large in comparison with business. Medicine does not need nor want in its ranks those who are activated by such motives. The chief rewards in the practice of medicine come to the individual doctor through the often unspoken devotion of his patients, through the sense of a task done to the best of his ability and through the knowledge that each day is sure to bring its interesting problems.

"Perhaps the most lasting reward is the sense he has of the faith of the people in his profession. This faith in doctors is a wonderful heritage, patients will tell secrets and problems of their lives

to doctors which their families and clergy never hear, even to a new and strange doctor. It bespeaks long years of correct dealing, fine ideals and good service. This faith of the people is the one thing that keeps the profession of medicine as a whole at a high level. Doctors are no different from other folk, but their form of service, their work and the faith of people in them are calculated to bring out the best there is in them. There is something about suffering that strikes home at the best fibers. It is something that makes one glad to miss a night's sleep or a friend's dinner."

Naturally, the principles of medical ethics are the same in essence as are the principles that should govern the conduct of all men in whatever vocation in life. The medical code in that the doctor's contacts and problems differ from those in other walks of life, differs from other codes to meet these peculiar contacts and solve these peculiar problems. Moreover, these problems have increased in number and changed in character as a result of the marvelous development of civilization, especially along scientific lines, and will continue to multiply with the ever increasing complexity of civilization. You will not be surprised, therefore, to learn that many new questions of medical conduct have arisen since the revision of the "Code" or "Principles" and which, naturally, are not discussed in that document and it is for this reason that I have spent the time in a discussion of the principles of ethics in the abstract rather than discussing concrete questions. Indeed it is obviously impossible to write a code which would cover all the questions that arise, and equally obvious to all thinking men that an attempt to do so would result as has a like attempt on the part of our political lawmakers, i. e., a revolt born of contempt, the consequences of which are not altogether harmless. Laws, to be respected, must be respectable. Decency and morality cannot be legislated into men. It must be born in them, and those born with these instincts need little more than intelligent understanding to enable them to discharge their duties acceptably.

The code of medical ethics always has been and always should remain, in large part, an unwritten law. The arguments advanced in their defense by those who transgress the code are usually plausible but careful contemplation reveals their real rottenness. To illustrate, the argument that the "laborer is worthy of his hire" and that "man is entitled to the fruits of his efforts" is advanced to excuse a man for patenting a surgical instrument, or a process of manufacture of a remedy or for keeping secret a cure for disease which he has discovered. At first glance this argument is fetching but on close analysis its speciousness is obvious. As an example, let us take a cure for cancer. Cancer is on the increase; in people over thirty-five, it ranks first

as a cause of death. It causes over 110,000 deaths in the United States alone every year. Every day that a cure for cancer is withheld from publication three hundred one people are dying in this country alone of the disease. Certainly one who would perpetrate for the sake of personal gain such an outrage as this upon humanity deserves a punishment for which the old-fashioned hades would be none too severe.

Today great complaint is made of the lack of physicians in the country places and the small towns. Pusey attributes this lack to the increased cost of a medical education because, he says, "This increased cost necessarily increases the cost at which medical service must be sold and decreases the number of people who can afford to pay for this medical service."

"'Tis true, 'tis pity, and pity 'tis, 'tis true," but I am sure that part of this lack is due to the epidemic of money madness that has been sweeping over the country since the World war which has, temporarily only, dulled our appreciation of the value of the very real rewards that come to them who give genuine service to the world. As evidencing the validity of this view it is only necessary to cite the movement along the line of public nursing, health centers, periodic health examinations and clinics. These movements show that the profession is not dead to its real duty, and on the other hand the protests that have been made against these movements by some members of the profession seem to show that there are among us many men whose values are based largely on money. A great hue and cry is going up against "state medicine" largely on the ground that it will spoil the private doctor's business. Whether it would or not is a matter of no moment. The real question is, can the state, by increasing the scope of its medical activities, serve the public better? It would undoubtedly be better for a few individuals if we would allow them to control all our public utilities, but in the interest of the people the more vital of them remain in the hands of the public.

Certainly health is a national asset second in importance to no other. The question of paid hospital service is now attracting a good deal of attention. It is one of those new questions referred to in an earlier part of this paper and a natural result of the ever increasing complexity of our civilization. Dr. Darrach, the dean of the Medical Department of Columbia University, thinks that physicians attached to hospitals should receive a fixed salary or be permitted to accept fees from ward patients. Whether fees should be charged to ward patients or not is a far reaching question and as Lewis in *American Medicine* says, deserves "thoughtful attention and free discussion at the various medical societies. It is important to register the opinions, attitudes and ideas of the leaders in the profession, out of which may grow an intelligent formulation of principles

applicable to the situation. The mere fact that money is involved should not lead to an assumption that the policy is sound and wholly desirable. Medical traditions should not be cast aside too suddenly because perchance commercialism stalks down the corridors of this age."

Doctors who advertise, in the ordinary sense, transgress the code. Why? Because all professional advertisements are in bad taste and most of them false. Why, you ask, is it wrong for a doctor to advertise that he makes a specialty say, of obstetrics. Well, if he is honestly devoting enough time to the study of obstetrics to make him especially skilled in this branch he must be falling behind his confreres in other branches. His advertisements say that he is better skilled in obstetrics than his competitors and his continuance in other lines of practice says he is their equal in these lines. Obviously, therefore, such advertisement is at once false and in bad taste and is not indulged in by high class doctors. On the other hand, one may with perfect propriety announce that his practice is confined to obstetrics. But even a perfectly ethical advertisement may not in good taste appear in the public prints. In other words, a perfectly proper announcement may not appear in an improper place. Another reprehensible method of advertising all too common in the profession is that of publishing operations, unusual calls, acquisition of office equipment, attendance at medical meetings, post graduate courses, etc., and attaching the blame to the reporters. Taking advantage of the impersonality which the situation offers, a great deal of advertising is done which is harmful both to the public and the profession, by so-called medical groups and clinics. Both these latter forms of advertising in addition to being in bad taste and harmful, are decidedly cowardly and unsportsmanlike.

The matter of consultations illustrates the impossibility of writing a code which will cover all points in ethics, or one in which even the major points will be permanent. Time was when consultations with any but so-called regulars was condemned, and very properly so. Today we have graduates of homeopathic and eclectic schools who are thoroughly competent physicians and surgeons. One, of course, would not hesitate to consult with such men.

On the other hand, to consult with an osteopath, a chiropractor, a faith healer, or any other dogmatist or faddist, would be at once to stultify oneself and his profession. The method of conducting consultations has changed materially. Like our diplomatic dealings, they are growing more open. Certainly the patient who pays the consultant is entitled to his opinion fully expressed. It is not only proper but more advisable at times for the consultants to go over the case in private, for reasons that seem obvious, but having done this each in the presence of the others, should ex-



press his opinion fully and frankly to the patient and all others to whom such an expression is due.

Let me close this rather rambling talk by saying that the most important part of the code of medical ethics has never been written in concrete form and except sporadically, as on occasions like this, never uttered in the hearing of medical students. I mean that part of the code with which prospective medical students should comply before matriculation. The prospective medical students should be acquainted with the obligations, trials, duties, and rewards of the physician, and knowing that a man's power is in inverse proportion to his credulity he should be ever ready to hear but slow to believe. He should be brave in championing the truth, knowing that the mark of rank in civilization is lack of fear. He must be true to himself, a staunch believer in Polonius' advice to Laertes—

"This above all—to thine own self be true  
And it must follow as the night the day  
Thou canst not then be false to any man."

He should have the soul and aspirations of the artist as so beautifully expressed in Kipling's "L' Envoi" and which I am so fond of repeating:

"When earth's last picture is painted, and the  
tubes are twisted and dried,  
When the oldest colors have faded, and the  
youngest critic has died,  
We shall rest, and, faith, we shall need it—lie  
down for an aeon or two,  
Till the Master of all good workmen shall set us  
to work anew."

"And those that were good shall be happy; they  
shall sit in a golden chair;  
They shall splash at a ten-league canvas with  
brushes of comet's hair;  
They shall find real saints to draw from—Mag-  
dalene, Peter and Paul;  
They shall work for an age at a sitting and  
never be tired at all."

"And only the Master shall praise us, and only  
the Master shall blame;  
And no one shall work for money, and no one  
shall work for fame;  
But each for the joy of the working, and each,  
in his separate star,  
Shall draw the *thing* as he sees *it* for the God of  
Things as *they are*."

Thus equipped when he matriculates the student will have little need of a written code when he graduates in medicine—medicine, as an art one of the most glorious, as a science one of the most splendid, as a trade one of the most despicable, as a profession because of the opportunities for service which it offers and the obligations it imposes, *it stands alone*.

I will close with a quotation from David Starr Jordan, expressing the thought which to my mind

should be paramount in the life of every man:

"So live that your after self, the man you ought to be, may in his time be possible and actual. Far away in the thirties, the forties, the fifties of the Twentieth Century he is waiting his turn. His body, his brain, his soul are in your boyish hands. He cannot help himself. What will you leave for him? Will it be a brain unspoiled by lust or dissipation, a mind trained to think and act, a nervous system true as a dial in its response to the truth about you? Will you, Boy of Today, let him come as a man among men in his time, or will you throw away his inheritance before he has had the chance to touch it? Will you let him come, taking your place, gaining through your experience, happy in your friendships, hallowed through your joys, building on them his own, or will you fling his hope away, decreeing, wanton-like, the man you might have been shall never be?"

## ACRODYNIA

(REPORT OF CASE)

ADELINE F. MUELCHI, M.D.  
EVANSVILLE

Since Bilderback's<sup>1</sup> report of ten cases of this condition in 1919, numerous case reports have appeared in the literature under various titles, such as "raw-beef hands and feet", "pink disease," "erythredema", "dermatopolyneuritis" and "acrodynia".

While the term "acrodynia" may not be the most suitable, since it was also used to describe a French garrison epidemic of 1828, probably due to arsenical poisoning of contaminated wine, it has, nevertheless, gained wide usage and is the one most commonly used.

As late as February, 1925, the treatment of this condition was still purely symptomatic and nothing had been found which would cut short the course of the disease. Then Rodda<sup>2</sup> observed that these cases made speedy and complete recovery following removal of the tonsils and adenoid, proving that the condition was the result of a focal infection of the upper respiratory tract and not a deficiency disease, as was claimed by a number of earlier writers.

My excuse for reporting this case is that it compares very favorably with those reported by Rodda, and bears out his statement that these cases clear up promptly and completely following removal of the tonsils and adenoids.

### REPORT OF CASE

E. M., female, aged fourteen months, was first seen November 14, 1925, with the complaint of fretfulness, watery eyes, skin eruption and failure to gain weight.

*Family History:* The parents and one sister were living and well. There was no history of a similar condition in the family.

*Past History:* The child was born on a farm September 13, 1924. The delivery was normal and the birth weight ten pounds and four ounces. She was breast-fed eleven months, then put on cow's milk. Fruit juice was added after the fourth month and tomato juice sometime later. At eight months of age she was a strong, healthy, good-natured child weighing twenty-two pounds and four ounces.

*Present Illness:* The mother remembered that just before the onset the child vomited one night and again the following day. The illness began rather suddenly May 25, 1925, with a head cold and watery eyes. She shunned the light and her mother thought she was taking the measles, especially when a few days later a fine papular rash appeared. She was kept in a dark room for two weeks, but there was no improvement. She became very fretful; nothing seemed to please her. She ate very little. She perspired profusely and the perspiration always had a peculiar odor. There was intolerable itching; she scratched constantly, often producing bleeding. After a month or two she began banging her head on the sides of her crib and on the floor to such an extent that it became necessary to carry her most of the time. She pulled her hair, cried incessantly and slept only a few minutes at a time. By August her weight had dropped to fourteen pounds and eight ounces. She cried during nursing and so was weaned, but because of the rash she was put on a formula of three-fourths skimmed milk plus one-fourth water. Vegetables were also added to the diet. In spite of this underfeeding she gained weight slowly but the skin condition grew worse. Her hands and feet became red and swollen. She chewed her fingers, bit her forearms viciously and rubbed her feet together. The miliaria lasted five to six days at a time, then disappeared only to return as bad as ever. About a month ago there was a foul discharge from the right ear which lasted about a week. The first tooth appeared at the eighth or ninth month. At one year of age she had twelve teeth. She had never tried to walk, but would pull herself up on her knees. There were three to five bowel movements daily. Recently there had been straining on urination.

*Physical Examination:* The weight was eighteen pounds. The child was brought in crying piteously and tossing herself about violently in her mother's arms. When put down for examination she acted very maniacal, screaming and banging her head on the table. She rubbed and scratched her eyes alarmingly and there was marked photophobia. She chewed her hands and rubbed the soles of her feet together. The nose was small and red and there was a profuse clear nasal discharge. There was mouth breathing and excessive drooling of saliva. When quiet she sat doubled up with her head pillowed on her feet. The skin was wet with perspiration. There was a

red papular rash resembling "prickly heat" over the entire body, more abundant over the back and abdomen. The hands and feet were dusky red and had the appearance of having been held in hot water for a long time, but they were cold and clammy and painful to touch. There were broken vesicles on the tips of several fingers. The soles of the feet were wrinkled and leathery. The pruritis of the hands and feet surpassed that of any part of the body. Behind the knees were large crusted lesions. The labia were swollen, red, leathery and crusted, the result of scratching. The skin around the anus showed the same condition. The inguinal glands were plainly visible. The muscles were extremely flabby and there was a diminution in the right patellar reflex. She had sixteen teeth. The right lower central incisor was quite loose, but the gums were normal. On the margins of the tongue were large irregular superficial ulcers. The buccal mucosa was normal. The tonsils were enlarged. Numerous small discrete cervical lymph glands were palpable. Behind the right ear was a crusted lesion. The tympanic membranes were dark, as though there had been a hemorrhage into them. There was some enlargement of the costochondral junctions of the ribs. There was broncho-vesicular breathing in both upper lobes and dullness on percussion. The liver extended 0.5 cm. below the costal margin.

The child was put on a diet of whole milk, cooked cereals, vegetables, orange juice and cod liver oil.

She was seen daily for the following week. The lung condition remained the same and there was a temperature of 100 F. at each visit. The von Pirquet test was negative.

*Laboratory Examination:* The Wassermann test was negative. A blood count showed a hemoglobin content of 62 per cent, red blood cells 4,290,000, white blood cells 12,300, with a differential count of neutrophils 78 per cent, small lymphocytes 9 per cent, large lymphocytes 12 per cent, and transitionals 1 per cent. A pure culture of staphylococci was obtained from the nasal discharge. Enormous numbers of short diplo-bacilli and a few fusiform bacilli were found in the smears from the ulcers on the tongue.

*Course:* This patient was given the treatment recommended by Rodda. The tonsils and adenoid were removed November 23, 1925, and the child sent home to the country. She was seen about once a month, and though the skin condition, disposition and appetite improved, she gained weight very slowly and the photophobia remained as bad as ever.

April 2, 1926, the weight was twenty pounds and two ounces. The muscles were still very flabby, but she was trying to walk. The skin, except that of the fingers, had cleared. The tongue was clean and the teeth firm in their sockets.



She played with her sister, had a very good appetite and slept well.

She was not seen again until April 1, 1927. At this time her weight was thirty pounds and eleven ounces, height thirty-six and five-tenths inches and age two and one-half years. It was difficult to believe that this was the same child. She was a well developed, active, healthy, intelligent child, well above the average in height and weight for her age. She was very friendly and talkative. The physical examination showed nothing abnormal. The only signs that remained of the previous illness were linear scars on the sides of the tongue, brown pigmentation in the popliteal spaces and on the flexor surfaces of the elbows, the latter also showing irregular white scars, the result of biting.

The mother said that the child had walked alone at eighteen months of age, her general condition had improved very rapidly and six months following the removal of the tonsils and adenoid she was apparently well again.

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### BEACON LIGHTS OF MEDICAL HISTORY

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*Thomas Sydenham*

The seventeenth in contrast to the idealistic sixteenth century was the stage for and witnessed the advent of modern realism in almost all departments of thought. It is with some professional pride that we find that medicine furnished the first example in what we are accustomed today to speak of as the exact method in human endeavor; hence that century is of great importance in that physicists and chemists and other scientific investigators began to be original instead of mere complaisant followers and imitators of the past. The previous years, nay the previous centuries, had encouraged and believed the extreme views that all human suffering, epidemics and devastating plagues, was the act of Divine Providence in punishment for some deed done by the individual or the nation who was paying the penalty imposed by the Creator for a failure to worship in accordance with the theological despotisms of orthodox fanaticism.

New ideas, new conceptions of nature's laws, new interpretations of natural phenomena, were springing up on every hand. There was a stirring deep down in the minds of men that found expression many years later in the great declaration of Emerson that "No truth so sublime but what it may be trivial tomorrow in the light of new thoughts." It was a day of sincere thinking and deliberation over the manifold duties and resultant possibilities of the right application and honest exposition of the revelations of the human intellect. Scientific research was given a semi-

respectable standing among the learned of the country. Colleges and universities were no longer sneering at the labors of men who were seeking unselfishly to better the conditions of mankind through deliberate and painstaking methods of medical research and general scientific investigations.

One of the foremost medical men of this period, in fact of any time, and a beacon light in the progress of medicine, is the subject of this brief biographical review, Thomas Sydenham, English physician, who lived during the middle portion of and the changing materialistic concepts of the seventeenth century.

Sydenham was born on the 10th day of September in the village of Wynford Eagle, in Dorsetshire, England. His father was an English gentleman of some property and of good standing in his community having a line of respectable ancestry in his family tree running back for several generations.

He was entered in Magdelene Hall, Oxford, at the age of eighteen after having received the usual rudimentary training given to the youths of that period until such day as they were considered ready for enrollment in one of the higher schools of learning of the period. He did not remain long at this institution as he left college to enter the military service of his country at that time passing through a transitional stage of democracy from the Monarch of James the First, to the absolute rule of the people under the commonwealth of the Cromwells, in 1653. After a term of service in the army he seems to have returned to his studies at Oxford as the records show that he completed his course there in 1648, graduating as a Bachelor of Medicine, which is equivalent of the present day degree of Doctor of Medicine. About this same time he was elected to a fellowship in All Souls College, which position closely corresponds with a professorship in our times. So he must have given promise of brilliant attainments to have been selected to lecture on medical subjects at this early age. The title of Doctor of Medicine, which was then largely an honorary degree, was not conferred upon him until thirty years later when he finally graduated as an M.D., not at Oxford, the college of his youth, but at Pembroke Hall, where a son was also an undergraduate student.

He did not long engage in the practice of his chosen profession for he again entered the military service and continued in this work for some years. It is quite probable that his independent thinking and brilliant attainments appealed to the military authorities as a measure to reduce the great amount of sickness and the high percentage of mortality among the troops in the service of the nation. His second entry into the army was the second year after Cromwell had arisen to the supreme power in the English government in 1654, as he resigned his fellowship at All Souls College

in 1655 no doubt to give his entire time and attention to his duties in the army of the commonwealth.

He was married about this time at the age of thirty-one, and the only reference I find to his family is that noted above where a son was in college with him at Pembroke Hall. A few years later Sydenham attended the medical school at Montpellier, France, which was a medical center of Europe at that time.

Wishing to enter active practice he passed the examination of the College of Physician of London to practice with the limitations of a radius of six miles from Westminster. There was a strong feeling of distrust and jealousy on the part of the faculty of this college against Sydenham on account of his innovations and radical departures from the established rules and system of practice prevalent at this period. The limit placed upon his territory of medical activities was probably for the purpose of combating as far as possible his bolshevistic tendencies in therapy and practice. Medical paternalism, it seems, was not a stranger in that land in that day. There was just as much skepticism and jealousies in those times as there are now, in all probability. It is some consolation to the pioneer of medical progress and to the courageous practitioner to know that new ideas and new ideals, if meritorious, will finally triumph as they did for Sydenham in those strenuous times. Notwithstanding the violent opposition that met his new doctrines, he attracted to his standard many of the brilliant men of the day, statesmen, philosophers and warriors. Oliver Cromwell was no doubt a close friend of this great physician. Among the most notable men of his clientele was the great logician, John Locke, and the eminent naturalist, Robert Boyle. While he had a numerous following among the learned and the elite of the day, he had also strong and bitter opposition as every man of advanced doctrines and new ideas has in every age and clime. One of the most persistent and prominent of his opponents was Richard Morton, who considered all diseases to be a poisoning of the vital spirits. Another of his famous detractors was Gideon Harvey, who ridiculed his medical contemporaries, not without some reason, because they began the treatment of every patient with cathartics on the second day, and wound up with emetics if the patient survived long enough. With delightful satire Harvey divided the physicians of his day into six distinct classes, significant of their several methods of treatment; the Ferra, Asinaria, Jesuitica, Aquaria, Lanaria, and stercorearia, according as their favorite system of treatment were iron, asses' milk, cinchonia, mineral water, venesection and purgation.

Sydenham published his first book in 1676, and was a rather prolific but not a voluminous writer. His greatest work is a summing up of his observations and speculations on medical practice

which was given the title of "Medical Observations," which contained the new things advocated by him in the practice of the healing art. He wrote other medical works, several of them extant, which are still a source of interest and pleasure to the medical historian of the present day.

He was not an anatomist, physiologist nor a pathologist in the sense that we now use those appellations, but was a most accurate observer and a cautious but vigilant analyzer of the forces that played about the destiny of his patients in health or in disease. Medical science in his day was hardly in its infancy. It was a conglomeration of superstition, repetition of old methods, and shotgun empiricism that was often as fatal to the patient, if not more so, than the disease itself. The great field of modern medical achievements was as yet untouched. The new continents of bacteriology, antiseptis, serum therapy, and surgical triumphs was an undiscovered country of which no medical Columbus had yet dreamed. The distinguishing mark of the humble English physician was his sincerity of purpose, his consecration to the welfare of his patients, and his constant and unremitting efforts to observe the working forces that have to do with the life and death of human beings.

He died in London on December 29, 1689, age sixty-five years, and was buried in the church of St. James, in Piccadilly, where a tablet marks his resting place, erected by the College of Physician of London, in 1810.

His medical achievements may be summed up briefly as follows: He was the first physician to differentiate between scarlet fever, measles and miliary fever, the latter being a very rare disease at the present day. Prior to his time the acute infectious fevers, except smallpox, were all classed as the same disease and all treated by venesection, purgation and other exhaustive measures. Sydenham, true to his ideals, studied the natural course of these infections, laboriously analyzed their symptoms, and soon separated them diagnostically into the different types as we know them now. He thus in great measure established the individuality of these common maladies and prepared the soil for the coming germ theory which was to revolutionize the practice of medicine before a great many decades. He taught that each disease was as separate and distinct an entity as the person afflicted with the same, and also recognized that back of each malady there was a separate and distinct cause could it only be determined.

He also introduced the cooling or, as we now call it, the expectant plan of treating human ailments, especially the acute fevers, and specifically smallpox, which was one of the prevalent diseases of his day. This treatment was a startling and pronounced departure from the customary but exhaustive methods of the time, which aroused the antagonism of his fellow practitioners as nothing else had done. He rebelled and openly de-



nounced the continued drawing of the blood of a patient already weak from the inroads of his malady. He proclaimed against the persistent and common use of purgatives which added to the further debilitation of the victim, and refused to use emetics which would oftentimes complete the story of exhaustion and death of the unfortunate patient.

It was indeed revolutionary for that day, but it was common sense, and we now wonder that intelligent men resorted to such methods of practice under the name of attempting to cure a given disease. This expectant method is now so generally recognized and of such universal practice that it seems strange to even refer to it nowadays.

Another of his great triumphs was the rescuing from oblivion of the treatment of the quartan agues of his time with the new and mystic bark imported from the new world, from the fabled land of the Incas of South America then under the dominion of the Spanish empire. The very first man to write upon the use of cinchonia or Peruvian bark was a Spanish physician named Barba, who published a work in Seville in 1642. This new drug of great promise was introduced into England shortly after it was brought to Spain, but was so abused that it soon fell into disrepute and was about to be forgotten when Sydenham took up the study of the drug and made a careful investigation of its action and curative properties when properly administered, and saved it to posterity as one of the greatest discoveries in the field of medical progress. Its use soon spread over the world, and made possible the conquests and settlements of the new lands and districts that otherwise would have defied the advance guards of civilization had it not been for the curative and prophylactic properties of the king of drugs for many years, quinine.

He was the first doctor to formulate and use, as such, the tincture of opium and introduced laudanum into the practice of medicine, which drug, while not in common use at the present day, played an important and necessary part in the relief of human suffering in the practice of our profession, and paved the way for the after refinement of this narcotic in the discovery and production of morphine.

He was one of the first, if not the first, to bring back to the attention of the medical world the old Hippocratic idea that had long since been forgotten and expressed in the Latin phrase, "*Vis Medicatrix Naturae*," which, expressed in modern thought and language, means help nature to help itself, or the inherent restorative power of the physiological process of the animal body. The history of our profession for centuries and centuries was a recital of meddlesome medicine and surgery. We are not entirely over it yet although great progress has been made along this line in recent years. Sydenham stood out boldly and courageously against the shotgun prescrip-

tions of his day and the exhausting practices of purgation, venesection and emesis that left the patient weak and completely exhausted. The people of those days must certainly have had fine and vigorous constitutions or the race would have become extinct under such indiscriminate mistreatment and depleting measures as the doctors indulged in in that period. Sydenham himself was not wholly free from this practice, as the truthful historian must record that there is on record a prescription of his which contained eighteen ingredients, all from the vegetable kingdom. But on the whole he was revolutionary in his teaching and practice in giving the patient and nature a chance and what was done should be of a sustaining and building up character rather than a depleting and exhaustive measure.

He was among the pioneers of medical thought in giving disease an individuality, which theory must necessarily precede the research and investigations of the cause of all human ailments. He believed and practiced with the thought in his mind that the affliction of his patient had as distinct an individuality and was as much an entity to be dealt with as such as the individual who was afflicted with the same.

There are many interesting stories told of him that are characteristic of his medical creed and practice: being called to see a gentleman who had been subjected to what he termed the lowering treatment to which reference has been made, and finding him in a pitiful state of unrest and physical weakness occasioned partly by the long illness and partly by the previous evacuations and emptiness, he says, "I therefore ordered for him a roast chicken and a pint of canary wine." When Blackmore, another English physician much younger than Sydenham, engaged in the study of medicine, he asked the latter who were the best authors to read and was directed to read Don Quixote, "which", he said, "is a very good book, and I read it still."

I close this brief biographical sketch of this great English physician with his most famous declaration, that should have, and does have, a place in the philosophy of every conscientious practitioner of the present day and hour, and that is, I believe, accepted as a necessary adjunct to whatever system or plan of treatment known to present day medical skill and science, and to which we may give our most sacred thought and devotion for the welfare of our patients, which declaration was, "I have consulted my patient's safety and my own reputation most effectually by oftentimes doing nothing at all."

In Ripley's "Believe It or Not," syndicated newspaper picture he states that Mrs. Frank Scott, of Jewell, Iowa, has thirteen children, all under five years of age!

Answer—Three sets of triplets and two sets of twins!  
—*Medical Herald*

## SPECIAL ARTICLE

### ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION

At the annual session of the American Medical Association in Washington, May 16 to 20, there was a registered attendance of 6,273, meaning at least 10,000 visitors to the convention city.

#### OUTSTANDING FEATURES

Among the outstanding features was an address by the President of the United States, Calvin Coolidge, who conferred high praise on the medical profession for its contribution to the social organization. The President and Mrs. Coolidge also held a special reception for physicians, on the White House lawn.

The departments of the national government, including the Army and Navy medical departments, the U. S. Public Health Service and many medical bureaus, especially those of the Department of the Interior, assembled exhibitions for the visiting guests.

The publicity relative to the session in the newspapers of the country was the greatest ever given to an annual meeting of the Association. This is presumably a reflection both of the increasing interest of the public in the progress of medicine and of the cooperation between the American Medical Association and the American press. Practically all of the great press services and newspapers have special representatives in Washington. Arrangements had been made by the headquarters of the American Medical Association for aiding the dissemination of publicity through these channels, both previous to and during the session.

#### HOUSE OF DELEGATES

The following statement concerning the proceedings of the House of Delegates is not in any sense complete. A fuller outline has already appeared in *The Journal* of the A. M. A.

At the first meeting of the House of Delegates, May 16, the Speaker, Dr. F. C. Warnshuis, urged continued attention to the problems of nursing education and nursing service in the United States. He suggested an attempt to solve the question of the requirements, qualifications and standards for a capable, competent surgeon and a means to aid the public in making such an identification. He also urged state licensure and special hospital legislation as a means for protecting the public against poor and incompetent institutions.

The president of the Association, Dr. Wendell C. Phillips, urged continuous attention to the education of the public in matters of health. He suggested a proper system of censorship to safeguard medical publicity. He again recommended consideration of the restrictions placed on physicians in the prescribing of alcoholic liquors.

The president-elect, Dr. Jabez N. Jackson,

urged new attention to the problems of medical ethics, and the preparation of a manual which would make clear both to the profession and to the public the intent of the "Principles of Medical Ethics."

The president of the Association appointed a committee, consisting of Drs. Ray Lyman Wilbur, Rock Sleyster, G. E. Follansbee, Harlow Brooks and William Allen Pusey to act on public responsibility, having to do with the relationship of the medical profession to the public.

On recommendation of the Judicial Council, the opinion was adopted that all articles of an educational nature on medical or health subjects intended for the lay press or lay audiences should give expression to the consensus of opinion of the medical profession rather than to personal views, and that such articles should appear preferably under the auspices of the American Medical Association or of one of its component county societies or constituent state associations.

#### REPORT ON MEDICAL EDUCATION

In considering the report of the Council on Medical Education and Hospitals, the House of Delegates adopted the report of its reference committee. This committee considered as overoptimistic the views of the Council that the present medical schools are adequate to supply places for those wishing to enter a medical school. The reference committee believed that the Council on Medical Education might devote more attention to the problems of the supply of physicians and the question of medical care in rural districts, to the preparation of a statement on the defects in the present situation and to similar subjects.

The reference committee considered it necessary that the present curriculum be reduced materially and that any consideration of a new curriculum should give special attention to the training of general practitioners, with brief courses in the more important specialties. The recent decision of the Council to recognize as suitable for internship only hospitals in which there is a minimum percentage of necropsies was approved and recommended.

#### INVESTIGATION OF HEROIN

The reference committee on legislation and public relation requested the Board of Trustees of the American Medical Association to have another investigation of the use of heroin made by the Council on Pharmacy and Chemistry in conjunction with some of the scientific sections.

#### EVALUATION OF REMEDIES

It was recommended that the Association condemn as unwise and futile any attempt to evaluate a therapeutic agent by legislative fiat, referendum, popular vote or any similar method. The conclusion was adopted that such evaluation can be made only by the investigation and decision of experts.



## DISASTER RELIEF

A consideration of the report of the committee on disaster relief resulted in the adoption of a recommendation that the American Medical Association urge constituent associations and component societies that have not already established disaster relief committees to do so as soon as possible.

## MORTALITY STATISTICS

It was urged by the adoption of a report of the reference committee on hygiene and public health that the attention of the United States Census Bureau be called to the impossibility of comparison of statements on maternal mortality of the various nations and that the bureau be urged to secure a strictly uniform definition of maternal mortality by the bureaus of vital statistics of various nations.

## COSMETICS

A resolution urging Congress to enact a law to control the manufacture, distribution, sale and commercial use of toilet preparations for preserving and enhancing personal beauty was referred to the Board of Trustees for action.

## EDUCATION OF SURGEONS

The reference committee on the speaker's address commended the section having to do with the duty of the American Medical Association to standardize and elevate the practice of medicine and surgery within and without hospitals through its own organization, but not through legislative or other agencies.

## APPOINTMENT OF DELEGATES

The reference committee urged that state societies appoint delegates in time to permit the speaker of the House of Delegates to announce the reference committees thirty days in advance of the session, so that these committees might give adequate attention to the various reports of officers and councils before the time of the session.

## HEALTH CONFERENCES

The importance of health conferences was recognized and attempts to reduce the duplication of efforts in various fields were encouraged.

## CONTRACT PRACTICE

The report of the Judicial Council of the American Medical Association to the effect that there were both ethical and unethical contracts possible, and that each contract must be judged on its own merits was approved by the committee and adopted by the House of Delegates.

## CHARGES FOR SERVICES TO INSURANCE AND INDEMNITY COMPANIES

A resolution to the effect that physicians were not under any obligation to provide information to insurance or indemnity companies unless paid the usual fees charged for similar services to private patients was approved and adopted by the house of delegates.

## PLACE OF NEXT ANNUAL MEETING

The Board of Trustees was asked to investigate

places for holding the next annual session and to present its approval of two or more cities which, on investigation, have been found to possess ample facilities. The Board of Trustees has authority to change the place of holding the session if for any reason it is deemed advisable.

## INCOME TAX REDUCTIONS

A resolution requesting the promotion of an amendment to the revenue bill relating to income tax, which gives the individual a right to deduct from his income tax the expenses of medical treatment for himself and family was referred to the Board of Trustees, with the suggestion that they in turn transmit it to constituent state societies for action.

## NURSING EDUCATION

Reports of the various committees on nursing education were received by the House of Delegates, and it was recommended that the American Medical Association give support in the work of the committee on grading of nursing schools and share in its financial program. The Board of Trustees appropriated the sum of \$5,000 for one year toward this end.

## THE PHYSICIANS' HOME

A special committee reported on the need of a physicians' home. The committee recommended that the secretary of the Association be requested to secure full information in regard to what is now being done by the profession for aged and incapacitated physicians, in various states and cities, so that other states or component societies may take measures to afford relief for dependent, worthy physicians, their widows and their orphans who may be in need. It was recommended that the secretary make a report on this matter at the next annual meeting. The committee was convinced that the need for a national home is not sufficient to warrant the American Medical Association in establishing, managing and sustaining a home.

## COLLABORATION WITH HEALTH OFFICERS

Collaboration between physicians and health officers was urged as the only method of meeting the public health situation for the good of the profession and the public.

## TRACHOMA AMONG INDIANS

The American Medical Association was urged to continue its affiliations with all the activities of the United States government of the work being done by the national committee for the prevention of blindness for the elimination of trachoma among Indians.

## LEGISLATION FOR COORDINATING GOVERNMENT HEALTH ACTIVITIES

The House of Delegates reaffirmed its approval in principle of the Parker bill, coordinating the health activities of the federal government under the direction of the United States Public Health Service. It also adopted the report of the reference committee recommending approval of the

Ransdall bill, appropriating \$10,000,000 to establish a national institute of health under the control of the surgeon-general of the United States Public Health Service.

#### DISABLED EMERGENCY MEDICAL OFFICERS

The House of Delegates reaffirmed its favorable action of 1922, requesting the passage of the Bursum bill, which relates to the retirement of disabled emergency army medical officers on a parity with all other classes of disabled officers of the World war now on the retired list.

#### MEDICINAL LIQUOR

The report of the reference committee of the House of Delegates to the effect that hereafter the House of Delegates shall not pass any resolution pertaining to the therapeutic value of anything and that no committee report empowering any such resolution shall hereafter be presented until it has been considered by the Council on Scientific Assembly and the Council on Pharmacy and Chemistry was adopted. Recommendation was made that the special committee on alcoholic liquors be continued and be directed to cooperate in preparing a bill to be presented to Congress correcting the unfortunate provision of the Volstead Act limiting the amount of alcohol used, and providing such regulations as will permit doctors to prescribe whatever amounts of alcoholic liquors may be needed for their patients, and subject to such reasonable restriction as may be thought wise and best after a conference with the head of the prohibition department.

It was also urged that the American Medical Association declare its adherence to the principle that legislative bodies composed of laymen should not enact restrictive laws regulating the administration of any therapeutic agent by physicians legally qualified to practice medicine.

A supplementary report of the Judicial Council recommended that "Every resolution presented relating to the alcohol question shall be referred to the Board of Trustees for investigation." The recommendation was adopted by the House of Delegates.

#### CAUSTIC POISONS

The House of Delegates approved the resolution extending to members of Congress the thanks of the American Medical Association for passing the Caustic Poison Act in 1927.

#### FORM LETTERS ON PERIODICAL PHYSICAL EXAMINATION

A resolution asking the Board of Trustees to prepare approved forms of letters or literature which may be sent out by county medical societies to the public to promote the value of periodic health examinations and information that the examinations can be made and records kept by qualified physicians who are members of the American Medical Association, in this manner helping to circumvent the harmful advertising activities of commercial agencies dealing with periodic health

examinations, was endorsed by the reference committee and adopted by the House of Delegates.

#### CONTRACEPTION

A resolution recommending the alteration of existing laws, wherever necessary, so that physicians may legally give contraceptive information to their patients in the regular course of practice was referred to the Board of Trustees of the Association.

#### HEALTH HAZARDS IN INDUSTRY

The resolution petitioning Congress to make possible an increase in the personnel and resources of the United States Public Health Service in order that the service may extend its activities in the field of industrial hygiene was referred to the Board of Trustees.

#### AMENDMENTS TO THE BY-LAWS

Notices of proposed amendments to the By-Laws: (1) defining the powers of the Judicial Council; (2) defining the legislative powers of the Association and the right of the House of Delegates to expel members or Fellows on recommendation of the Judicial Council; (3) a resolution changing the members of the Council on Medical Education and Hospitals was presented and must lie over to 1928 for action.

#### WOMAN'S AUXILIARY

A motion that the House of Delegates request the Board of Trustees to appoint a liaison committee between the American Medical Association and the Woman's Auxiliary was adopted.

#### ELECTION OF OFFICERS

In the election of officers, Dr. William S. Thayer of Baltimore was elected president of the Association; Dr. Charles A. Elliott, of Chicago, vice-president; Drs. Olin West, secretary, and Austin A. Hayden, treasurer, were re-elected, as were also the speaker, Dr. Frederick C. Warnshuis, of Grand Rapids, Mich., and vice-speaker, Dr. Allen H. Bunce, of Atlanta, and the trustees, Drs. Edward B. Heckel, of Pittsburgh and Rock Sleyster, of Wauwatosa, Wis.

The president, Dr. Jabez N. Jackson, made the following nominations to appointments on the various councils: For the Judicial Council, Dr. Donald McCrae, Jr., Council Bluffs, Iowa, and Dr. Frank Cregor, of Indianapolis, to succeed Dr. Thayer; for the Council on Medical Education and Hospitals, Dr. Emmett P. North, St. Louis; for the Council on Scientific Assembly, Dr. Frank H. Lahey, of Boston. These nominations were confirmed.

#### THE SCIENTIFIC SECTIONS

More than three hundred manuscripts were read in the sixteen scientific sections of the Association, covering many medical subjects. A complete list of the papers read with the names of the persons discussing them appears in *The Journal of the American Medical Association* for June 11, 1927, beginning on page 1896.—*Bulletin of the American Medical Association* June 10, 1927.



## THE JOURNAL of the

### Indiana State Medical Association

Devoted to the Interests of the Medical Profession of Indiana

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Editor and Manager

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## EDITORIALS

### VERTIGO

When a physician is confronted by a patient suffering from vertigo he has a great mystery to unravel. Only by more or less systematic examination can the physician hope to discover the origin of the vertigo in a given case. The immediate cause of vertigo is always to be found in the apparatus which controls equilibrium. However, the vertigo may be a manifestation of disturbed function of the liver, kidneys, cardiovascular system, etc., but these morbid conditions cause the vertigo indirectly and only through the agency of the semi-circular canals. Thus, in a case of renal insufficiency, certain waste products retained in the blood may produce vertigo, but they do this only by stimulating the semi-circular canals. One should constantly bear in mind that while the immediate cause of the giddiness is always the equilibratory apparatus or its nervous pathways, the underlying or remote cause may be not only some other part of the otological apparatus but, in fact, any of the important viscera.

In order to facilitate the discovery of the underlying cause, Levine (*Practical Otology*, 1927), whose opinions we liberally quote, recommends that the physician proceed in examination according to some definite scheme which he discusses under five heads as follows:

First, *Aural*: This necessitates the complete study of the aural apparatus, including a functional test of the hearing, and of the apparatus controlling equilibrium. Essential in the functional examination of the hearing are the tuning fork tests in order to determine whether there is any deafness and, if so, whether it is an affection of the sound conducting or the sound perceiving apparatus. The functional examination of the apparatus controlling equilibrium is of special importance, and the tests used include the falling test, past pointing, the rotation test, the caloric nystagmus test, the fistula test, and the galvanic test. These tests should be carried out by the trained otologist. It should be remembered that trivial disturbances of the auditory apparatus, not only of the internal ear but also of the middle and external ear as well, may produce vertigo. Even the irritation caused by impacted cerumen in the external auditory canal sometimes will cause this symptom.

Second, *Neurological*. If the aural apparatus itself has been found normal, one should proceed

to examine for possible evidences indicating involvement of the nerve tracts that connect the semi-circular canals with the brain. Any of the great variety of lesions of the cerebellum, medulla oblongata, or the associated pathways, may produce vertigo. Tumor, hemorrhage, thrombosis, infarct, abscess, gumma, tubercle, or leukemic conditions are among the nervous diseases that may cause vertigo if located somewhere in the course of the nerve tracts that connect the equilibratory apparatus with the brain. Lesions of the cerebellum are common causes of the vertigo. In the majority of cases of multiple sclerosis, vertigo is pronounced.

Third, *Ocular*. If otological and neurological examinations have failed to disclose any adequate cause for the vertigo, the next step is to examine the eyes, for vertigo is a common complaint of patients who as a result of paralysis of the extraocular muscles or errors of refraction, suffer from diplopia. The double image gives rise to a sense of confusion which the patient interprets as vertigo, because it does not depend on vestibular irritation, and furthermore, disappears as soon as the patient closes his eyes. True vestibular vertigo persists regardless of whether the eyes are open or closed.

Fourth, *Cardiovascular*. Vertigo is a common symptom in the course of many cardiovascular diseases. Its occurrence results not from the nature of the disease of the heart or blood vessels but solely from insufficiency of the blood supply to the labyrinth. The most pronounced grades of vertigo occur in those diseases that interfere with the blood supply of the brain (and of the labyrinth as well), such as aortic valve lesions, thoracic aneurism, heart block, and auricular fibrillation.

Fifth, *Toxemia*. Various poisons may be retained in the blood, irritate the equilibratory apparatus and thus cause vertigo. As an example we have the giddiness following an alcoholic debauch, or ether anesthesia, which is apt to persist until the irritating poison has been eliminated from the system. The same condition obtains with reference to any other exogenous drug or poison that is capable of stimulating the equilibratory organs. Endogenous poisons may be retained in the circulation as a result of renal inadequacy, or in consequence of perverted metabolism, or of disturbed functioning of the important viscera, abnormal chemical compounds capable of irritating the semi-circular canals may find their way into the circulation. All sources of toxemia, both exogenous and endogenous must be taken into account.

Vertigo, nystagmus, and falling constitute the symptom complex of vestibular irritation. Spontaneous past pointing in the direction of the falling tendency is a rule in organic vertigo. The Romberg test is present, and the gait shows a falling tendency toward the side of the lesion. In

pronounced grades of vertigo, nausea or vomiting may be present. In the functional type, vertigo may be present as an isolated symptom. In fact, the absence of a spontaneous nystagmus, past pointing, or equilibratory defects, is one of the distinguishing features of functional vertigo.

The treatment is that of the underlying condition. Besides correcting any local ear disturbances that may be found it is necessary to bring the circulation and metabolism to a normal state. However, as stated by Levine, the majority of cases of vertigo are due either to a circulatory or metabolic abnormality.

#### A DIPLOMA MILL IN INDIANA

Indiana is right up to date. Until very recently it had a diploma mill. The reason that it has no diploma mill now is because the *Indianapolis News*, through the fine work of one of its star reporters, uncovered the fraud and published the facts. The diploma mill was known as the College of Drugless Physicians, incorporated at Washington, D. C., in 1924, and at the time of the exposé was located in the Empire Life Building, Indianapolis. The head of the so-called school was Otis J. Briggs, who graduated from Earlham College with a bachelor of arts degree in 1917. He also holds diplomas from several so-called schools, including the United States Naturopathic Institution of Washington, obtained in 1923, and some other institutions of like character. For some little time the Board of Medical Registration and Examination had suspected him of running a diploma mill, and the evidence seems to show that he already has granted some 150 diplomas, probably all of which were issued without any other requirement on the part of the receiver than the payment of a liberal fee for the diploma. In order to obtain the necessary evidence to prove the fraud, the reporter for the *Indianapolis News* made application for and within two hours received a diploma upon the payment of a liberal sum for the same. The diploma was dated back to November, 1926, in order to get behind the provisions of the new medical law, and the diploma states that the reporter was enrolled on the roster of students of the college on May 3, 1926, with a year's credit for work in some other school. In addition to this, Briggs issued to the reporter rent receipts which indicated that money had been paid to help maintain an office from November 23rd, 1926, to July 15, 1927. The whole story, an interesting one to be sure, is published in the *Indianapolis News* of June 24, 1927. Briggs, the erstwhile dean of the College of Drugless Physicians, has been arrested and charged with running a diploma mill, and detectives are in possession of an abundance of evidence taken from the offices of the so-called school. While the Board of Medical Registration and Examination has been suspicious of this so-called College of Drugless Physicians, it remained for the *Indianapolis News*

to do the real detective work and publicly expose the fraud. In an editorial concerning this matter, the *Indianapolis News* of June 25th has the following to say:

"Some of the severe critics of the new law throwing additional restrictions round the treatment of the sick in Indiana have their answer in the arrest Friday of Otis J. Briggs, head of a diploma mill. A News reporter went to the place where Briggs says he conducts his school, and for the payment of a comparatively small sum received a diploma stating that to him had been granted the the degree of doctor of 'naturopathy.' As the new law has a sort of grandfather clause, exempting from examination by the state board of medical examination and registration all who were practicing prior to the first of this year, the *News* reporter's diploma was doctored to show that he had been in school before that time. As a matter of fact he never went to a medical or 'naturopathic' school at all, and so told Briggs. The reporter questioned the ethics of the procedure. 'Say, to hell with the ethics!' Briggs replied.

"There is the nub of the whole situation. Physicians must devote years to preparation for their work. The Briggs diploma factory ground out diplomas as easily as a kodak is operated. Briggs pressed the button and out popped a diploma. If there had been no exposure of his methods scores who had bought diplomas from him would have been certified to the state board as having complied with the law—as having practiced their profession prior to January 1. They would have been licensed by the state of Indiana and turned loose on the public, many of them not knowing a muscle from a nerve or a stomach from a kidney.

"The arrest of Briggs should not close the investigation. The state board of medical examination should insist that every diploma that may be questionable in the slightest degree be run to its source and the standing of its holder determined. The new law was not intended to prevent the practice of healing arts by those who know what they are doing, but it was aimed at quacks and fakirs. It ought to be enforced to the letter."

#### SMALLPOX IN INDIANA

Within recent months smallpox has gained considerable headway in the state of Indiana. This unfavorable condition of affairs can be credited to the work and influence of the Christian Scientists, the members of the League for Medical Freedom, the members of the Anti-Vaccination Society, and a lot of other fanatics who have fought medical progress at every turn and managed to have their vicious influence felt sufficiently to give such communicable diseases as smallpox a chance to thrive. Most of these obstructionists claim that smallpox is a disease that is bred in filth and that proper sanitation and plenty of sunlight will prevent the spread as well as cure



the disease. Nothing could be further from the truth, as smallpox may develop in an individual who lives under the most sanitary conditions and who follows all of the accepted rules of health outside of adopting vaccination as a preventive measure. The public should know that smallpox never develops in persons who have been vaccinated successfully within recent years, and that there is an overwhelming mass of evidence to prove the efficacy of vaccination in stamping out the disease. Sometimes we think it would be a blessing if we did away with prevention of every kind for the purpose of teaching the people what can occur when they pay no attention to established rules of procedure in the protection of health and life, but the trouble with that plan is that many innocent would suffer along with the guilty. We don't want to wish anyone bad luck, but we would be willing to sacrifice a year's income to see a person suffering from a virulent case of smallpox circulate freely among a lot of Christian Scientists and members of Anti-Vaccination societies who have not been vaccinated. If there is nothing to fear then the Christian Scientists and the Anti-Vaccinationists ought to escape having the disease and the experience would be a splendid test of faith. We know of one former rabid anti-vaccinationist who was nasty in his objection to the compulsory vaccination of school children and who offered to head a squad of citizens in tarring and feathering the health officer of his community who had ventured to announce that smallpox existed in the community. The aforesaid anti-vaccinationist even prevented vaccination of the members of his own family. He paid the penalty by having the disease himself, and his wife and children suffered likewise. Fortunately the house maid in the family, whose birthplace was in Germany where they have a wholesome respect for vaccination, was vaccinated, and she alone of the household escaped the disease and was able to minister to the wants of the sufferers. As a form of righteous justice and sequel to this episode, the anti-vaccinationist recovered with smallpox scars all over his face, the loss of vision in one eye and considerable impairment of vision in the other. He now believes in vaccination. As we said before, we do not wish anyone any bad luck, but it is a pity that some of the Christian Scientists and Anti-Vaccinationists cannot get their education in the same way. Medical men have a duty to perform in educating the public to the necessity of adopting recognized preventive measures to suppress communicable diseases, of which smallpox stands at the head.

#### FOOD FADDISTS

There is nothing that makes us quite as tired as the faddist who expects to mould everyone to his narrow-minded way of thinking. Unfortunately we have faddists in the practice of medi-

cine who overwork a theory or a certain practice and to which lay persons are expected to bow down with reverence. In analyzing the real motive back of the faddist we generally can count upon commercialism or perhaps a desire to be "in the limelight" as the incentive. The food faddists, together with any institutions over which they may be connected in any way, are offenders that disgust most rational-minded physicians. These food faddists recommend anything from sawdust and bird gravel as a breakfast food, to the strict vegetarian diet, and the blatant manner in which they put their propaganda across to the public succeeds in getting a lot of converts who are quite willing to take up with most anything that glaringly promises hope of improving health, and who are credulous enough to believe that the moon is made of green cheese if someone will shout loud enough concerning that old fairy story. The trouble with these food faddists is that they resort to gross exaggeration, and, figuratively speaking "their music is all on one string."

In considering the question of diet there are many factors to be taken into consideration, not the least important of which is the personal equation. Age, occupation, temperament, climate, personal idiosyncrasies and several other factors must be considered. The man doing hard manual labor out of doors and in a cold climate can eat and digest a quantity of meat that would be harmful to the man who is following a sedentary indoor life. Likewise, the man who lives in a cold climate can consume more meat than the man who lives in a hot climate. People living near the equator thrive best on fruits and vegetables, whereas the people living in the far north thrive best on a diet that is composed largely of meat. Old people require less meat than those of middle age who are active. The campaign against meat has been carried to absurd lengths, and it is high time that the food faddists receive some rebuke from those who have studied the question and arrived at conclusions that have some scientific basis rather than a commercial or exploiting motive. For the average individual a well-balanced ration, of which proteins form a considerable part, is absolutely necessary for the best physical and mental work and the preservation of health. The quantity and the variety of food will depend upon factors already enumerated. Unquestionably many people eat too much meat, and not enough of uncooked vegetables and fruit which contain an abundance of vitamins. To banish meat entirely from the diet is foolhardy, as the Japanese found in war when they discovered by actual contrast that their soldiers did best on a mixed diet rather than upon a diet of vegetables and cereals.

The whole question of diet should be divorced from the influence of the faddist, and decided upon the conditions governing the individual case.

## LAY WELFARE ORGANIZATION DIS-CREDITS MEDICAL PROFESSION

The Infant Welfare Society, of Chicago, is charged by medical men with practicing medicine. The Society is headed by a layman who makes great claims concerning what has been accomplished by the Society, and gives little credit to physicians if not really discrediting the work of the medical profession in securing a better milk supply and better hygienic conditions which, in the final analysis, is the real cause of the lowered infant mortality in Chicago. To the various claims put forth by the lay head of the Infant Welfare Society, Doctor Emmett Keating, a prominent practitioner of Chicago, publishes a rejoinder in the June issue of the *Illinois Medical Journal*, which points out the falsity of the claims put forth and, in general, places the responsibility for better conditions and lowering of infant mortality to the work of the medical profession, individually and collectively. He says that as a business, charity is so profitable that in Chicago the Association of Commerce finds it advisable to publish an annual containing the names of those charities and welfare organizations which the Association, with commendable caution, says it believes to be worthy. There are two hundred sixty-five organizations listed in the report for 1926. These two hundred sixty-five organizations made a total expenditure for 1926 of \$22,612,191.45. Dr. Keating says, "medical charity is divided into three kinds: First, the services given by the physician to those unfortunates whom he treats as private patients but from whom he expects no compensation; Second, the service given the dishonest, who evade payment; Third, the service of physicians who head clinics and capitalize on professional prominence. Medical attention is one of the necessities of life. So are food, clothing, housing and heat. Banks will not harbor the suggestion that they should give money without interest, without hope of return of principal, even to the deserving poor. No one argues that the landlord should not collect rent, nor that the merchant should not be paid for the necessities of life. Medical men, not laymen, are the ones who are in a position to deal intelligently with problems connected with health. Where poverty exists, medical service, like the other necessities of life, must be administered without asking the recipient to pay. The flour and coal that are given to the poor are bought and paid for. Medical service for the poor who are in the class that must be furnished flour and coal should also be bought and paid for. However, there never has been a time in the history of medicine when the physicians of the neighborhood were not willing to give their services free to people unable to pay. To say, then, that people earning a certain income should be given free service by the medical profession, is to take a

position that is neither financially strong nor economically right. The final arbiter of the infant's fate is the family doctor. Whatever discredits his abilities deprives the public of his needed service." Dr. Keating strikes the keynote when he intimates that so much of this welfare work by laymen, the leaders drawing fat salaries, is encouraging pauperism and dependency and should be suppressed.

## SOME RULES TO PREVENT EAR ACHE

A New York ear specialist says that the cardinal rules for bathing should be, "Don't swallow; bend forward and let the water drip from the nose; don't blow the nose." He says that this will do away with much of the possibility of incurring inflammatory conditions of the nose, throat, and middle ear. Contrary to the general belief, water in the external auditory canal accompanying diving is not harmful unless there is a perforation of the drum. A tightly fitting rubber cap will prevent water from getting into the ear. The same specialist says that the prevention of an infantile cold requires that the baby be trained to lie in a certain position. The prone position (on the stomach) has many advantages over the supine position, especially during a cold. In the prone position the drainage from the eustachian tube and nose is normal towards the throat, and in the supine position drainage is often reversed toward the ear. As a matter of experience the best position for all aural cases in adults as well as infants is that with the face toward the pillow. Children trained to lie on the stomach easily become accustomed to it. Another advantage of the prone position is that the child does not kick off the covering, thereby avoiding chilling. Ear-aches generally occur at night. The reason may be found in the faulty position of the child. Regurgitation of acid is provocative of tonsillitis and adenoid irritation. The addition of a little soda to the drinking water will minimize this. If the baby has developed a coryza it must be remembered that ordinarily this is a secondary effect of an adenitis. Therefore, treatment in the main should be directed to the throat. Instillations, frequently, of mineral oil, followed by a few drops of twenty-five per cent solution of argyrol sufficient to reach the throat, and the administration of a little soda or a portion of a sodamint tablet to the drinking water, and the maintenance during sleep of the prone position, will render the coryza innocuous.

## MEDICAL ADVERTISING

At this year's session of the A. M. A., held in Washington, the editor of THE JOURNAL introduced in the House of Delegates a resolution calling attention to and condemning the practice of some prominent medical men of advertising and exploiting themselves in the lay press through



the medium of articles ostensibly for education of the public concerning individual and community health. Judging from letters received from various physicians over the country there is widespread approval of the resolutions offered and a letter from a prominent surgeon in far off Honolulu says that it is high time that the American Medical Association should go on record as enforcing the principles of ethics or abandon that creed altogether. Here in Indiana we have had numerous examples of self-exploitation on the part of some of our prominent medical men, to say nothing of similar infractions on the part of some of the little fellows. If we are going to do any housecleaning, and certainly it is indicated, let's begin at the top and be no respecter of persons. The Principles of Medical Ethics lays down definite rules concerning advertising and self-exploitation, and we quote from Section Four, Chapter Two, as follows:

"Solicitation of patients by physicians as individuals, or collectively in groups by whatsoever name these be called, or by institutions or organizations, whether by circulars or advertisements, or by personal communication, is unprofessional. \* \* \* It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertisements, or by furnishing or inspiring newspaper or magazine comments concerning cases in which the physician has been or is concerned. All other like self-laudations defy the traditions and lower the tone of any profession and so are intolerable. \* \* \* It is unprofessional \* \* \* to employ any methods to gain the attention of the public for the purpose of obtaining patients."

We respectfully call the attention of our confreres to the last sentence which, it seems, covers the impropriety and the bad taste exhibited by some of the medical men of Indiana who have been seeking patronage through the medium of advertising of one kind or another in the lay press. We frankly admit that conditions in Indiana are no worse than they are in several other states, but the conscience of the entire medical profession, including the medical men in Indiana, must be exerted in the interest of a higher standard of conduct on the part of many physicians who are guilty of a violation of all the rules of decency and propriety. Either the Principles of Medical Ethics which we have adopted means exactly what is stated or means nothing. If nothing is meant then we should rescind our approval of the code and permit every medical man to follow his personal inclinations in conduct whether right or wrong. The general recognition of the laxness with which we have enforced our code of ethics has been responsible for the action of the House of Delegates of the A. M. A. in urging that more attention be given by teaching institutions to the presentation of the subject to students. Of equal necessity should be the teaching of the code of ethics to a great many men already in medical practice who seemingly do not know what the word ethics means. Furthermore, something more than mere talk is necessary, for until we

begin to discipline and penalize the members of our profession who fail to live up to the code of ethics we are not going to have a profession generally composed of physicians who comport themselves as gentlemen and who by their conduct uphold the dignity and honor of the profession.

The code of ethics is a reasonable safeguard for professional conduct if followed.

#### FREE CLINICS BY COUNTY MEDICAL SOCIETIES

State, community and municipal free clinics are a growing evil. They have spread in Michigan and other states to an alarming extent. First established for the deserving poor, they now are patronized by the well-to-do. The services are gratuitous. In some localities all of the services are donated by the attending physician while in others a very small and insignificant fee or salary is paid to the doctors who serve in the clinics. Fortunately Indiana so far has not been plagued to any considerable extent with these state, community or municipal clinics, and we hope that there will be no occasion to fight such enterprises. However, there is a movement on foot in one or two cities in Indiana to establish municipal clinics for the deserving poor, and this movement is sponsored by philanthropic and benevolent uplift associations of one kind or another. The scheme has very dangerous possibilities and should not be encouraged by physicians. The truth of the matter is that there are no indigent or poor people in any community in Indiana that cannot receive medical attention without money and without price at the hands of reputable physicians if deserving of such consideration. If a clinic could be established and run in the interests of the *deserving poor only*, little criticism could be offered, but there isn't a clinic in the whole world that isn't abused and abused shamefully by people who are not entitled to charity in whole, and oftentimes not even in part. In consequence we hear on every hand complaints from general physicians to the effect that some of their regular patrons who are able to pay something for services are taking advantage of free clinics and not infrequently boasting of it. In nearly all instances the visitors to a free clinic are pushed along towards the road to pauperism and dependency instead of being made to understand that they must, at the time or at some future date, pay for services rendered in accordance with ability to pay. The whole system is wrong, inasmuch as it is not properly supervised, and under any conditions does not encourage self-respect and independence. Like most of the benevolent and philanthropic enterprises that require the services of physicians in order to keep them going, the medical profession is to blame for not only the development and maintenance of such enterprises but for the ills that go along with them. Whenever medical men, individually and collectively, refuse

to be a part of these various uplift schemes for pauperizing the people there will be an end to much of the abuse that calls forth the general condemnation by many of our general physicians who are in a position to note the ill effects of the system. Objection to these free clinics is not based on any disinclination to bestow charity where due, but is based upon the recognition of the fact that the system is wrong and that there isn't a community in the state that has any crying need for free clinics in view of the established practice of all reputable medical men to render gratuitous services to the deserving poor. However, if we are to have municipal or community clinics, then they should be organized, controlled and their policies determined by the medical profession of the community where the clinic is to be established. For the moment we know of no better scheme than to have these clinics under the sponsorship of the county medical society. The patrons of any free clinics should establish beyond question the right to receive gratuitous service.

#### WHISKEY AS MEDICINE

In his letter to Governor Jackson urging the amendment of the Wright prohibition, Attorney General Gilliom is right in asking that it be made possible for people to have filled prescriptions of reputable physicians, when those physicians prescribe whisky. Indiana is one of the few states in the Union—perhaps the only one—in which this may not be done. The Volstead act permits it, and next fall the manufacture of whisky for medicinal purposes, under federal supervision and control, will be begun. Last week the convention of the American Medical association took this view, basing the action on the ground that laymen should not by law be clothed with power to say what physicians shall or shall not prescribe.

And that is the main point. It is not for laymen, such as certain prohibition leaders, to say that there are no cases in which whisky does not operate as a medicine. Mr. Gilliom believes that the lives of his children were saved by the use of whisky, which he and his friends had to violate the law to get. The same thing is said to be true of Mrs. Jackson, who is now, we are glad to know, on the road to recovery. In these cases whisky was prescribed by reputable physicians. But it could be had only by violating a law. It is this law which Mr. Gilliom would have amended. "Every humane consideration," he says, "requires that statutory provision be made whereby reliable whisky may be procured in emergencies of serious illness when attending physicians prescribe it as an indispensable medicine."

The real and underlying question is, not whether whisky is or is not medicine, but whether the legislature of Indiana shall destroy the right of skilled physicians to prescribe whatever they think need-

ful in any given case—for to make it legally impossible or legally a crime to have a prescription filled is in effect to deny the right to prescribe.—(*Indianapolis News.*)

#### EDUCATION OF THE PUBLIC IN MEDICINE

At the session of the American Medical Association in Washington, the House of Delegates considered carefully the question of education of the public in matters of medicine and of health. It was recognized that such education is desirable for the good of the public and that it aids the medical profession by securing intelligent cooperation in the control of disease both in the individual and the public. On the other hand, it was also recognized that the publication of articles on health subjects may serve unduly to advertise an individual and that the articles may reflect individual views, rather than well established scientific facts or the views of physicians as a group. Some system of control seems to be needed, particularly at present when the entire matter is in process of development. The House of Delegates concluded that interviews or articles of an educational nature on medical or health subjects, intended for the lay press or lay audiences, should give expression to the consensus of opinion of the medical profession rather than to personal views which may be in conflict therewith, and that articles should appear preferably under the auspices of the American Medical Association or one of its component societies or constituent associations.

In the matter of education of the public regarding the structure of the human body or its functions in health or of the changes that occur in the human tissues and in the functions in disease, there is seldom occasion for difference of opinion. When differences of opinion do arise, they concern matters not well established, or questions of the economic status of the medical profession or its public policy.

There are today at least fifteen individual physicians conducting health columns for the education of the public. Most of these proffer sound advice; occasionally, a column will be devoted to the promotion of a proprietary product in which the conductor seems to have become unduly interested; sometimes to a peculiar notion as to what constitutes good exercise, as for example the somersaulting mania of one columnist; sometimes to the promotion of too rigorous diets in connection with the idea that obesity is a menace to longevity, and sometimes to the strange notion that disease is entirely a matter of the infecting organism and the individual's natural immunity, and that factors which may lessen his natural immunity have little or nothing to do with the case. The instances mentioned are specific, reflecting material that has appeared in some of these individual health columns in recent weeks.



It would be well for all physicians who write on health subjects to bear the conclusions of the House of Delegates in mind. Sufficient accurate information is available, of which the public is as yet uninformed, to offer material for years to come, at least until the knowledge of the average man relative to the human body and its functions shall have caught up approximately with that of the intelligent man of today. In the meantime, discussions of new discoveries, of proprietary products and of special notions may well be confined to medical periodicals, which constitute an open forum for determining the actual status of things in dispute—*Jour. A. M. A.*, June 11, 1927.

### DIPLOMA MILL EXPOSE

The confession of a man operating an alleged school of drugless healing in the heart of the Hoosier capital reads like fiction to a public which has learned to respect the arduous training which supposedly precedes attainment of the title of doctor. Fake diplomas, false credentials, receipts for rent that was never paid and other fraudulent papers composed the equipment with which the "students" of the "College of Drugless Physicians" were to be turned loose on a gullible public. With more expense, but scarcely more time and trouble than would be necessary to make a casual purchase, these students were transformed overnight into doctors. One shudders alike at the evident gullibility of some who paid their money and at the fate which would befall a patient of those supposed drugless healers.

The nation's attention was directed some time ago to the operation of diploma mills in New England and in St. Louis, where practices similar to those just disclosed were revealed. It has been seldom, however, that defiance of the medical law has been reported in Indiana. The case is important in illustrating the dangers against which the state board of medical registration and examination must be constantly on guard. Whenever an attempt is made to strengthen the Indiana law or to arrest persons violating the medical statutes, the cry of persecution generally is raised and it is often easy to persuade a group of politicians or jurymen that the defendants are the under dog and entitled to sympathy.

The attempt of the last legislature to strengthen the medical law did not achieve all that the public interest required, but it did mark a step forward in providing stricter regulation. Its effect was sufficiently evident to compel the "dean" operating the diploma mill to predate and "age" diplomas in the hope of deceiving the state licensing board. The present case should strengthen the hand of the authorities by stripping the fraudulent practitioners of the cloak of martyrdom they have used with some success in cheating the law. There should be no room anywhere in Indiana for the diploma mill "graduate."—*Indianapolis Star*, June 27, 1927.

### EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital. We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

The patient always should remove the shoes when the Romberg test is employed to detect spontaneous falling, or to detect deviation of the gait when the patient is blindfolded. In conducting the Romberg test how many physicians ask patients to remove the shoes?

Ye gods! The fish are biting and we are "rar-in' to go" after them. However, already we have gotten the fishing tackle ready for the last week in this month, when we will be in a position to extend pity to the poor devil of a doctor who hasn't sense enough to take a vacation!

PHYSICIANS in some of the counties in Indiana are revising their fee bills and advancing rates for any and all kinds of professional service so that the charges will compare favorably with the advanced cost of services in any other field of human endeavor.

IF anyone entitled to THE JOURNAL fails to get his regular copy by the end of the month will write us we shall be pleased to furnish duplicate copy. The request should come direct and not be passed through the county medical society secretary or the secretary of the State Medical Association.

ONE of our pet peeves is to be called upon to make some sort of a head examination of a young male patient whose hair is saturated with vaseline or some other kind of grease in an endeavor to follow one of the asinine practices instituted to make the hair lie in some particular way. Some day one of these pale blue asses with oil-soaked hair is going to be thrown right through the window.

ANOTHER one of our pet peeves is to have someone take three days to answer a telegram calling for information to be wired at our expense, and then send the information by mail. We have had that experience on more than one occasion and have wondered why the offending persons escape a dose of paris green from the hands of the one who has to suffer for such stupidity.

REVEREND SHUMAKER, leader of the Anti-Saloon League in Indiana, continues to insult some of the prominent members of the medical profession of the state because they have publicly stated that they believe that alcoholic beverages have a therapeutic value. Reverend Shumaker seems to think such opinions express a desire on the part of the speakers to secure alcoholic beverages for themselves. Handling the truth so loosely is a fine example from one who poses as a follower of the lowly Nazarene.

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ONE of our editorial friends in an adjoining state congratulates us upon having some of our editorials copied in the *Chicago Tribune* with due credit. Evidently some of our ideas concerning alcoholic beverages for therapeutic use meets with the approval of the *Chicago Tribune*, as it is our opinion concerning prohibition as it affects medical men in their daily practices that received consideration. Well, we are glad that a paper of the character and prestige of the *Chicago Tribune* agrees with us.

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KOCH not only has commercialized his tuberculosis cure but he commercializes everything he does, if all reports are true. Certainly patients pay roundly for anything that Koch does for them, and we recently have heard of two patients with rather ordinary skin lesions who claim to have paid Koch three hundred dollars each for one single injection of one of Koch's remedies that was recommended as probably giving relief, though Koch with an eye to business told them that it might require a second injection, and of course at the same price. For true commercial instinct Koch puts the ordinary quack to shame.

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THE editor of THE JOURNAL and his wife were vaccinated against typhoid before leaving for Europe last winter. That this was a wise precaution was evidenced by the fact that some traveling companions did run into typhoid and suffered in consequence. It is a good plan to advise all travelers to accept typhoid vaccination as a preventive, and this advice is especially appropriate right now at the beginning of summer vacations and the widespread tendency on the part of the people to take extended automobile trips with the inevitable contact with many kinds of foods and drinks that may be contaminated.

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THE new American Medical Directory is by far the finest thing of its kind ever published. It lists all of the physicians of the United States, good, bad and indifferent, and tells what their qualifications are, even to membership in national, state and special societies, teaching positions, and whether possessing certificates from the American College of Surgeons, the American College of Physicians, or any of the Boards for Examination such as those for ophthalmology and otolaryn-

gology. It also lists hospitals, medical schools and like institutions. In other words, the A. M. A. directory is a sort of "who's who" record.

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JUDGING by the newspaper clippings that come to our office from all over the state we are inclined to believe that in certain localities there are doctors always seeking the limelight, and finding means to keep themselves before the public through newspaper publicity. Oftentimes this newspaper publicity is not distinctly unethical, according to the Principles of Ethics, but to say the least it is in exceedingly bad taste and disgusts confreres who are quite well aware of the fact that the publicity is sought and does not come about accidentally or without the knowledge of the one receiving it.

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Don't quote fees over the telephone, and especially to people you do not know or who will not make known their identity. Usually such people are "shopping" for the lowest price and would not prove satisfactory patients anyway. They are able to pay but think it is smart to shop around and get some reputable man to compete with perhaps the less experienced in the matter of price. The best way to handle such people is to tell them that if they are looking for price rather than quality of service, it would be a good idea to go to the village butcher who handles a knife well and probably would be willing to do the work cheap.

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RECENTLY we suggested to an old lady eighty-six years of age, who is mentally alert but physically rapidly retrograding, that a tablespoonful of good whisky or brandy, well diluted, taken with her meals, might prove very beneficial. The old lady said that her son was a rabid prohibitionist but that some of her friends could furnish her with a good grade of pre-Volstead whisky and that she would try the prescription. Perhaps the old lady's life will be prolonged and that she will be physically better and mentally happier as a result of the tonic and aid to digestion furnished by the whisky, but we fear that when some of the prohibition fanatics hear of the affair they will immediately claim that the old lady is headed for a drunkard's grave.

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WE are very proud of our Bureau of Publicity of the Indiana State Medical Association. It is doing a wonderful work in educating the public concerning problems relating to individual and community health. Every week an article is released for publication in the daily press of the state, and it is pleasing to note the favor with which these articles have been received and generally published by newspapers in Indiana. The articles are devoid of technicality and are written in a layman's language and in a manner that a



layman can understand. Best of all these articles do not advertise or exploit any individual physician but are published under the auspices of the Indiana State Medical Association. What Indiana is doing can be copied by other states as also by the great American Medical Association.

THE Carnegie Corporation has donated ninety thousand dollars, distributed over five years, for research work on otosclerosis, a form of chronic progressive deafness. The work is to be done under the direction of the Scientific Committee of the American Otological Society. This study of chronic progressive deafness is a very important one with perhaps far-reaching effects as pertains to the economic and sociologic status of a very large number of people. It is hoped that as a result of the efforts to be put forth, measures may be discovered for the prevention of otosclerosis and successful treatment of it in those persons who are suffering from it. Donations are solicited from those who are philanthropically inclined, whether lay persons or professional men.

PROBABLY there isn't a county medical society in Indiana that within recent years has disciplined or penalized a member for unbecoming conduct as a physician. Certainly there are breaches in medical ethics, and misconduct of one kind or another, by many physicians who retain membership in our county medical societies but who deserve to be disciplined or penalized for their misconduct and as a salutary example for the younger men in the profession who look to the older men for guidance. Some meetings are opened with prayer. Why not open medical meetings by reading the Code of Ethics? Perhaps the mere reading of the code would have a beneficial effect upon some men who need constant reminders to encourage them to do the right thing.

*HYGEIA* is a health journal for lay people. It is published by the American Medical Association, and the information furnished is trustworthy. While the circulation is growing as a direct result of the merits of the periodical, yet it has not grown to the extent that is possible with more cooperation of physicians in recommending *Hygeia* to their patrons. Abstracts of all articles appearing in *Hygeia* are sent to the daily and weekly newspapers. County medical societies should ask the lay papers in their several communities to publish these abstracts and thus promote health education of the public. Reading rooms and libraries should make *Hygeia* accessible and medical societies or even individual physicians will be justified in paying a subscription for any well-patronized reading room.

JUDGING by what we read in the homeopathic medical journals there is evidence that many of the homeopathic physicians have accepted the

Koch tuberculin therapy buncombe in its entirety. It is a good thing for Koch, as he undoubtedly is reaping a rich harvest in consequence, for be it known that the Koch remedies, so far as we have been able to learn, are extortionately expensive. It might be well for some of these credulous doctors to take into consideration that it is Koch principally who boosts the Koch remedies. If there really is any virtue in the Koch tuberculosis treatment that fact could be substantiated and would be accepted by scientific men the world over, and Koch would reap fame and a reasonable fortune in consequence. No one knows this better than Koch himself, but realizing that his claims will not stand the light of scientific investigation he resorts to a species of quackery which he knows is more profitable.

BEGINNING with April 1, 1926, both the Wassermann and the Kahn tests have been performed on all blood specimens reaching the Illinois State laboratory for the serum diagnosis of syphilis. A record of many thousands of Kahn tests has thus accumulated in comparison with the Wassermann test. Thomas G. Hull, Springfield, Ill. (*Journal A. M. A.*, June 11, 1927), reports on the results. Kahn and Wassermann tests were made on 25,744 specimens with relative agreement in 97.8 per cent. Clinical histories on 200 specimens in which the Wassermann and Kahn tests disagreed indicated that the Kahn test is more sensitive than the Wassermann test in treated cases. The advantages of the Kahn test are in the saving of labor, time and cost; in the definite character of Kahn reactions in specimens in which the Wassermann is anticomplementary; in comparative simplicity, and in reduction of technical errors.

THE Madison County Medical Society is conducting a reference bureau to which all questions concerning health may be directed and to which answers are given by the bureau through the columns of the daily papers. By this means the public may obtain trustworthy information concerning individual and community health, though the bureau will not attempt to give advice concerning treatment for individual cases, nor make an attempt to diagnose conditions. The advice on health given by the bureau is not over the signature of any individual physician, hence there can be no charge of advertising or exploiting any individual physician. There is no reason why similar health articles should not appear in the newspapers of any populous community under the auspices of the local county medical society, and supplement the splendid articles that are released every week by the Bureau of Publicity of the Indiana State Medical Association.

CHARITY work is about the most unsatisfactory done by the average physician who is ever ready

to donate his best services to the worthy poor. Not only is charity service unappreciated by many of those to whom it is rendered, but the average charity patient gives the attending physician more trouble than any of the pay patients, and perhaps a large proportion of the unjust complaints and threats concerning malpractice come from charity or near-charity patients. However, it must be understood that most of the charity patients are ignorant, and it is ignorance which makes it hard for them to understand what is being done for them, why it is being done, and the results that may be expected. It also is ignorance which makes them unappreciative, even when the results are excellent. In spite of all of the unpleasantness arising from charity work, every reputable physician continues to do it because he feels that it not only is his duty, but it is a pleasure to help those who cannot help themselves.

"MAYOR THOMPSON of Chicago has appointed a business committee of three hundred citizens who are highly competent men of affairs, with an executive committee of nine, for the cooperation of public administration and private enterprise. This is a commendable, even a sagacious move on the part of the mayor and should create the projection of administrative programs of great value and of unprecedented effect upon public welfare. The mayor chose from every influential walk of life except one—the medical profession. There is not a doctor on the committee." (*Illinois Medical Journal*, June, 1927.) This is about the kind of a deal that the medical profession gets in any city and is only an indication of the need of greater interest of medical men in civic affairs and general welfare matters. Physicians do more real welfare work than those of any other vocation, and there is no reason why they should not be recognized on committees that have to do with civic affairs.

A pharmaceutical manufacturing company sends out an advertising legend which reads as follows: "Longer Life: To Have on Every Birthday a Complete Physical Examination Insures More Birthdays, Better Health and Greater Enjoyment of the Days to Come." It is signed "Your Doctor." That's a fine suggestion, but really, how many doctors are prepared to make a complete physical examination such as recommended by the A. M. A. Some of our patients have said that they have asked their family physicians to give them a complete physical examination and were met with the answer, "What do you need with that? You are all right. It is time enough to be examined when you are feeling badly." There are many doctors who ought to have it pounded into them that a complete physical examination means just what it says, and that every lay person is entitled to thoroughness when he asks for an examination, whether well or not,

and that when he receives such service he is willing to pay adequately for it.

DOCTORS very generally are complaining about collections. Is it any wonder when we know that about seventy-five per cent of our population has mortgaged future income to pay installments on luxuries? When the average citizen gets through paying weekly or monthly installments upon his automobile, radio, jewelry, and even clothing, there isn't much left, and what is left goes to pay for recreation and amusements. The doctor suffers along with the grocery keeper, and must take his chances in getting anything for services rendered, and the peculiar feature of the situation is that the average citizen knows that the doctor will wait for the money or perhaps donate the bill altogether. The truth of the matter is that the average physician is too easy with patrons when it comes to payment of bills for professional services. There is no occasion for "exactng the pound of flesh" from the deserving poor, but there ought to be greater diligence put forth to collect from *those who can pay but don't*, and that means the great middle class of people who are living beyond their means and indulging a taste for expensive luxuries instead of paying the bills for necessities of which medical service is one.

THE Physicians' Fellowship Club of Chicago was founded eight years ago. Its purpose is to discuss questions of policy affecting the medical profession, as well as questions of policy affecting both the medical profession and the public. Its motto is, "The Health of the Public depends upon the Private Physician." Many important questions touching upon the economic and ethical side of the practice of medicine have been discussed by the club. The abuse of medical charity is one of the live subjects of today, and right now there is a movement on foot to do away with the free service of county and municipal institutions. One of the members of the club recently has said, "It is time that the medical profession makes it clear to the public that the people's best interests will be served when the public fully understands that we will stop giving away medical services except to those of our own patients whom we personally know are burdened with so many misfortunes that they are entitled to our help without cost to them." It wouldn't be a bad idea to have Physicians' Fellowship Clubs in all of the prominent cities, for the influence of members could be used in suppressing much of the abuse of medical charity that now exists.

WELL, vacation days are here! And despite the fact that over-zealous assessors and sand-bagging tax ferrets have more than trebled our taxes for the current year, without there being a corresponding increase in the capital, the editor of THE JOURNAL is going fishing. And what a



vacation it promises to be! In the wilds of Canada, 150 miles from a railroad, and not accessible by a flivver or even a pack mule! No telephone, no mail, and you don't have to wash your face or comb your hair for two weeks if you don't want to. A sacrifice of time and money, yes, and in one sense we can spare neither, but in another sense it brings rich returns. The very joy of living is exemplified in such a trip taken each year in midsummer, accompanied by rod and reel and a zest for conquering the members of the finny tribe, and enjoying all of the pleasures to be found in the great outdoors, far from civilization. Do we take medical books, medical journals, or paper upon which to write about medical subjects? Not if we possess the slightest sanity when starting out. Fishing equipment, pipe, tobacco, an agreeable companion, and lakes filled with hungry fish are quite enough. We pity the doctor who hasn't a good chance to take a *real* vacation such as this contemplated one, even if he has to beg, borrow or steal the money to pay the expense.

SELF-PRESCRIBING is a habit with many lay persons. The practice did not arise as a result of the influence of proprietary medicine manufacturers, as sometimes suggested, but as a result of the mistake on the part of physicians in telling patients what is prescribed for them for various disorders. A little knowledge is a dangerous thing, and especially when it comes to self-prescribing for human ailments. It leads to sins of omission as well as commission, and, anyway, why should the patient know what and how much the doctor is prescribing. Most of the drug abuses by laymen owe their origin to the practice of the family physician in telling what he is prescribing. Thus morphine, aspirin, quinine, argyrol, and dozens of other medicinal agents are procured and taken by lay persons without rhyme or reason, and all because of knowledge obtained from the family physician who has prescribed these remedies to meet certain conditions, and ever afterward the patient has considered himself capable of judging when such remedies are applicable and in what dosage. It is not the use but the abuse of these remedies that makes secrecy necessary in prescribing for patients. It is the only way to prevent the patient from harming himself through lack of intelligence in his self-prescribing.

THE Scientific Committee of the Indiana State Medical Association has decided that no papers shall be presented at the next session of the Association to be held in Indianapolis Wednesday, Thursday and Friday of the last week in September. In other words, the entire session will be devoted to dry clinics, with presentation of cases and discussion. There has been some objection to this kind of a program, but we believe that the committee is preparing a scientific treat that will

make everyone who attends the session feel that he has gained more real practical working knowledge to help him in his daily work than he has ever before received at a State Association convention. The committee is putting forth every effort to have the clinics so arranged that they will be diversified, and that the subjects under discussion shall be presented in a comprehensive and practical manner. All branches of medicine and surgery are to be represented. Much is to be expected from the discussions that will follow the presentation of cases by the leaders. The arrangements for the convention mean an enormous amount of work for the local men who, however, are equal to the task. We are satisfied that more practical good will come from the coming convention than has ever come out of any other session of the Association.

THE number of lay welfare organizations that pretend to have something or other to do with individual and community health is so large that it is absolutely impossible to keep track of them. All of these organizations are making a bid for donations, and in all of them there is a more or less wasted effort, to say nothing of enormous expense entailed in employing high-salaried executives and assistants. In fact, we are led to believe that many of these organizations are maintained primarily as well as secondarily to furnish salaried jobs to a lot of persons who are the chief sponsors of such enterprises. Some of these welfare organizations have no legitimate reason for their existence. Others are quite worthy and should be sustained, but their work should be coordinated, if not combined with the work of allied associations. In this manner a great saving in time, labor and money could be effected. Furthermore, the average business or professional man gets so tired of seeing soliciting committees, or receiving begging letters, that he oftentimes gets peeved and refrains from supporting some very worthy enterprise which he would support if he were not bled white for money to help keep up some of the unworthy and thoroughly unnecessary welfare activities.

THE selection of secretaries for county medical societies ought to be a serious proposition, and yet we believe that with the average society it is a sort of a perfunctory affair, as evidenced by the character of secretaries elected by a few of the county medical societies in Indiana. One county medical society has elected the same secretary for several years and he isn't worth powder to blow him up. When the attention of the members of the society was called to this fact, they said that the physician who was elected was the only one who would have the position and consequently they kept him in office. Certainly some of the young and progressive medical men ought to be willing to serve as secretaries, and they should

be given encouragement and assistance in making their work effective. As we often have said, a secretary can make or break any organization. Whenever you find a progressive medical society, there you will find a live and progressive secretary. The society that exists only in name and does nothing worth while for its members usually has a secretary who is dead from the neck up. In passing we may say that in some counties in Indiana the members of the medical society, with perhaps an exception or two, also are dead from the neck up. It is such fellows who kick because their neighbors employ doctors in adjoining counties.

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IF anyone wants to buy a high frequency outfit we think we can find about one hundred Indiana doctors who each can supply the demand. Perhaps in a few years there will be several hundred Indiana doctors who will be quite willing to dispose of ultraviolet ray equipment. High pressure salesmen have a real easy and pleasant time selling a lot of gullible doctors a bunch of physical therapy apparatus that has only a limited field of usefulness. We are not condemning physical therapy apparatus of any kind, for we believe that each one has its special field of usefulness and occasionally results are secured from its use that are almost miraculous, but we do believe that there is a lot of buncombe associated with the sale of much of the physical therapy apparatus that is on the market, and not a few doctors are just plain "grandstanding" in the use of such equipment. When used intelligently the results justify the means, but the average doctor has about as much use for much of the expensive equipment that the high-pressure salesman tells him he ought to have, as a dog has for three tails. We have seen some doctors' offices that look like junk shops, but we never have been able to satisfy ourselves that any better work was done there than in the office across the street where the doctor confines himself to the necessary equipment and has learned to use that intelligently.

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SINCE introducing the resolution into the House of Delegates of the A. M. A. at the Washington session concerning self-advertising and self-exploitation in the lay press by prominent medical men we have received from a physician located in a distant state a quotation from the *Saturday Evening Post* which reads as follows:

"Some famous surgeons—this is among ourselves, remember, and not to be whispered outside our own circle of ten million readers—have perfected and developed a most subtle yet elaborate and tremendously effective brand of personal press agency that reaches straight into the inner sanctums of city, small-town and country newspapers scattered over a wide stretch of the country."

Some of our big men would hold up their hands in holy horror if someone suggested that display advertising in our daily papers be taken and paid for at current rates, but they have no hesitation in

accepting, yea, in even soliciting gratuitous advertising through the medium of eulogistic press write-ups, or personal contributions intended to educate the public in individual and community health. To our notion the blatant quack who buys and pays for display advertising and holds himself out as equipped to treat any kind of bodily ailment is open to no more criticism than the big men in our medical societies who advertise and exploit themselves under the guise of some altruistic movement, and in all probability the quack who pays for his publicity and claims no alibi is more respected by publishers and editors of lay publications.

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THE American College of Surgeons has established and is maintaining a department of literary research in connection with a scientific library devoted to medical subjects. The department was organized to furnish a library service to members of the surgical profession wherever located. Medical and surgical literature is abundant, but it takes time and requires intelligence and well-directed effort to obtain a useful and unprejudiced review of any medical problem. The department of literary research of the American College of Surgeons has an organized staff, including translators in the German, French, Italian, Dutch and Scandinavian languages compiling information from the medical and surgical literature of those countries, and associated workers who will answer the occasional call for Russian, Polish, Bohemian and other languages not extensively used in the medical literature. The department began six years ago to fill the requests for such research service from the Fellows of the College, but the service has been extended to cover requests from everywhere. Aside from a very extensive library which may be consulted by the profession, the College has instituted a package library which in reality is a circulating library and supplements the furnishing of information on special subjects, abstracts and translations which are prepared upon request. All of these activities are very valuable to physicians who should take advantage of such assistance.

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A PATIENT suffering from impaired vision consulted an eye specialist who found a nephritic retinitis present, and the urine containing albumen, granular casts and other evidences of a chronic interstitial nephritis aided in the diagnosis. Upon inquiry the patient said that she was under treatment by a new doctor whom she had consulted a few weeks before. When asked as to what the doctor had said concerning her condition she replied that he told her her liver was out of order, and that "liver trouble" accounted for her headaches, impaired vision and general depression. The information also was volunteered by the patient that the doctor had never called for nor had



he examined a specimen of urine, or, in fact, done anything but feel of the pulse and look at the tongue. Afterwards he prescribed for the so-called "liver trouble." The doctor is a member in good standing of his county medical society and the Indiana State Medical Association. Is it any wonder that many people lose confidence in doctors? The doctor in question charged two dollars for his first examination, which included medicine, and at that *robbed the patient*. Had he investigated the case as he should, and made an intelligent diagnosis he could have charged ten dollars for his services and the patient would have received something worth while for the fee paid. Such men need the educational influence obtained by attendance at medical society meetings and clinics, but usually they are the kind who think they cannot learn anything from that source.

A FEW months ago the Indiana county assessors met in convention in Indianapolis and decided that more money should be raised by taxation and that the way to do it was to increase valuation. In consequence the abused taxpayers of nearly every county in the state are now struggling with equalization boards in an endeavor to secure a modification of unjust appraisements. As a fair sample of what is occurring, one young struggling surgeon was assessed three thousand dollars for instruments and medical books, and yet his entire equipment did not cost one-half that amount and could not be sold for a fifth as much. When he complained to the assessor he was informed that it was generally known that instruments and medical books cost a lot of money and accordingly it was taken for granted that a high valuation was warranted. Another doctor who was offered three hundred dollars for his automobile in a trade for a new one, was assessed twelve hundred dollars for the automobile. Still another young doctor, recently married and just starting house-keeping on a modest scale, was assessed two thousand dollars for furniture that in the beginning did not cost half that amount. Instances of this kind have occurred in various sections of Indiana, so it must be that the tax assessors have combined in their efforts to "sting" the public. Is it any wonder that this, along with Shumaker, the League for Medical Freedom, the Christian Scientists, the Anti-Vaccinationists, and all the other obstructionists, stimulates the *Chicago Tribune* to put the query, "What's the matter with Indiana?" We may turn out statesmen, writers, inventors, and truly great men in a variety of human endeavors, but we certainly raise a good crop of individuals with lop-sided brains.

### DEATHS

W. F. BUTLER, M.D., of Cayuga, died June 5, aged 70 years. Dr. Butler graduated from the

Medical College of Indiana, Indianapolis, in 1895.

E. D. EHRLMANN, M.D., of Rockford, died June 8, aged 73 years.

J. R. MOUNTAIN, M.D., of Connersville, died June 10, aged 55 years, at Cleveland, following an operation. Dr. Mountain graduated from the University of Michigan Medical School, Ann Arbor, in 1898. He was a member of the Fayette County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

B. R. SMITH, M.D., of Connersville, died May 30, aged 54 years. Dr. Smith graduated from the University of Louisville School of Medicine in 1903.

ROBERT A. CUSHMAN, M.D., of Princeton, died June 7, aged 51 years. Dr. Cushman graduated from the Medical College of Indiana, Indianapolis, in 1902. He was a member of the Gibson County Medical Society, the Indiana State Medical Association and the American Medical Association.

WILLIAM R. CRAVENS, M.D., of Bloomfield, died June 5, aged 58 years. Dr. Cravens graduated from the Kentucky School of Medicine, Louisville, in 1892 and from the Central College of P. and S., Indianapolis, in 1896. He was a member of the Greene County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

F. C. HAMILTON, M.D., of Hudson, died June 1, aged 80 years. Dr. Hamilton graduated from the Fort Wayne College of Medicine in 1888. He was not in active practice at the time of his death.

### NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION*. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. AND MRS. W. A. FANKBONER, of Marion, have gone to Europe for a three months vacation.

DR. E. A. KING and Miss Margaret Simminger, both of Fort Wayne, were married May 21.

THE first volume of "The History of Medical Practice in the State of Illinois" is now ready for delivery.

A complimentary dinner was given by the Fort Wayne Medical Society at the Anthony Hotel, Fort Wayne, June 7, in honor of the seventieth birthday of Dr. Kent K. Wheelock.

DR. C. R. STRICKLAND, of Indianapolis, discussed "Blood Vessel Diseases in Clinical Medicine" before the regular meeting of the Muncie Academy of Medicine, May 27th.

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DR. C. H. FULLINWIDER, of Mount Vernon, was re-elected president of the Posey County Medical Society at the annual meeting of the society held in New Harmony, May 26th.

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DR. JOHN F. BARNHILL, of Indianapolis, was elected president of the American Laryngological, Rhinological and Otological Society, Inc., at the recent convention of the society in Atlantic City.

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DR. PERRY WOOLERY, of Heltonville, left June 1st for Chicago where he will take postgraduate work in diseases of children at the University of Chicago.

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DR. E. RAY ROYER has located in North Salem for the practice of medicine. Dr. Royer practiced medicine at North Salem many years before the war.

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THE Tippecanoe County Medical Society held a meeting at the St. Elizabeth Hospital, Lafayette, June 9th. Dr. Charles S. Williamson, of Chicago, presented a paper on "The Newer Knowledge of Iron in the Anemias."

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DR. AND MRS. WALDO C. FARNHAM, of South Bend, have gone to Europe and will return some time in September. Dr. Farnham expects to visit the larger clinics in Europe and do some intensive studying of diseases of the eye, ear, nose and throat.

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THE Tenth District Medical Society held a meeting at the Elks Temple, Valparaiso, June 9. Papers were presented by Drs. H. Crosland, of Gary, George R. Daniels of Marion, Robert B. Preble, of Chicago, and Dr. D. B. Phemister, of Chicago.

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DR. L. B. HILL, of Seymour, Indiana, and president of the Jackson County Medical Society for this year, retired from the practice of medicine several weeks ago because of ill health and advanced age. He has gone to Baraboo, Wisconsin, where he will live with his son.

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DR. HOMER G. HAMER, of Indianapolis, was elected president of the American Urological Association at the meeting of that association held in Baltimore, May 24th. Dr. Hamer is the second Indiana man to be elected to that office, Dr. William N. Wishard having served in 1904.

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DR. EUGENE A. STURM left Jasper, Indiana, April 30, and is now taking post graduate work in Berlin and later in Vienna. He will return to Indiana about Christmas time this year. Dr. Sturm is accompanied by his wife, his mother and his son. Mrs. Sturm is studying music in Berlin and Vienna.

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THE last meeting of the Madison County Medical Society was held June 21st. The members of the society were guests of the Reed Drug Company, of Anderson. Professor C. O. Lee, of Purdue University School of Pharmacy, was the guest of the evening and presented a paper on "Need of a Closer Association Between the Physician and the Pharmacist."

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PREPARATION for the annual meeting of the Northern Tri-State Medical Association, which will be held in Detroit in April, 1928, has begun. A local committee has been selected. The program will consist of a one-day session with clinics in the morning and addresses in the afternoon. Dr. Howard Kelly, of Baltimore, has been invited for the evening address.

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THE United States Veterans' Bureau Hospital at Knoxville, Iowa, is in need of a specialist in Pathology. Applications for the examination for this position are now being received by the U. S. Civil Service Commission. Full information regarding requirements for entrance to the examination may be obtained from the United States Civil Service Commission, Washington, D. C.

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THE Fourth District Medical Society held its twenty-third annual meeting at the Elks' Home in Seymour on June 2nd. Dr. Robert W. Moore, of Indianapolis, presented a paper on "Some Important Points in the Treatment of Heart Disease." Following dinner, Dr. Frank W. Cregor, of Indianapolis, gave a talk on "The Relation of the Medical Profession to the State."

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THE American Board of Otolaryngology conducted an examination at Washington, D. C., on May 16 and 17, and at Spokane, Washington, on June 4. Of the 142 men examined at Washington, D. C., 119 were passed and 23 failed to pass examination. In Spokane, the number passed was 46, and the number failed was 6. The next examination will be held in Detroit on September 12, 1927. The applications for examination should be sent to Dr. H. W. Loeb, secretary, 1402 South Grand Boulevard, St. Louis, Mo.

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DR. FRANK W. CREGOR, of Indianapolis, has been appointed a member of the special committee of the American Medical Association and the



American Dermatological Association to arrange for the first International Dermatological Congress. This appointment was received from J. H. Mitchell, M.D., Chicago, chairman, American Medical Association, Section on Dermatology and Syphilology. Dr. Cregor will be one of the eighteen physicians selected throughout the country as a member of the committee to arrange for this congress. The congress probably will be held within the next year or two, the time and place to be set at a future meeting of the committee. Nine men have been selected by the American Medical Association and nine have been selected by the American Dermatological Association.

Doctors who formerly lived in Illinois or who are descendants of pioneer physicians of the "Illinois country" will be interested in knowing that Volume One of the "History of Medical Practice in the State of Illinois" is ready for delivery. The History has been written under the supervision of a committee appointed by the Illinois State Medical Society as a commemoration of its seventy-fifth anniversary but more especially to make a living tribute to those men of the medical profession who played so able a part in the exploration, settlement and development of the Illinois country. The second volume is now in preparation and will bring the history up to the present time. The edition is limited and will not be reprinted. Volume One is now ready. Volume Two will follow soon. Orders may be sent to Committee on Medical History, Illinois State Medical Society, Medical and Dental Arts Building, 185 North Wabash Avenue, Chicago, Ill. Dr. Charles J. Whalen is chairman of this committee.

THERE are 164,002 physicians listed in the new American Medical Directory, just recently come from the press. The Directory publishes time and place of graduation and year of license of each physician, and also society membership, specialty and office hours are given. The Directory also contains information concerning hospitals and sanitariums of the United States. Descriptive data appears following the names of 7,816 hospitals and sanitariums such as type of patients handled, capacity, and name of superintendent of directory. The list of physicians in each state is preceded by a digest of the laws governing medical practice in that state; members of licensing board; state board of health; names of city, county and district health officers; officers of constituent state association and component county and district medical societies. The book is a vast source of reliable data concerning the personnel of the medical professional and the institutions and activities closely related to it. It contains 2,575 pages. It is published by and may be obtained from the American Medical Association, 535 North Dearborn street, Chicago.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:

Neonal.

Certified Laboratory Products:

Ethylene—C. L. P.

Cutter Laboratory:

Alkali Weed Pollen Extract—Cutter.

All Scale Pollen Extract—Cutter.

Box Elder Pollen Extract—Cutter.

Burning Bush Pollen Extract—Cutter.

Corn Pollen Extract—Cutter.

Foxtail Pollen Extract—Cutter.

Mountain Cedar Pollen Extract—Cutter.

Tumbleweed Pollen Extract—Cutter.

Western Water Hemp Pollen Extract—Cutter.

Fairchild Bros. & Foster:

B. Acidophilus Milk—Fairchild.

Horlick's Malted Milk Corporation:

Horlick's Maltose—Dextrin Milk Modifier.

H. K. Mulford Company:

Lamb's Quarters Pollen Extract (Glycero-Saline)—Mulford.

Ragweed Pollen Extract (Glycero-Saline)—Mulford.

Timothy Pollen Extract (Glycero-Saline)—Mulford.

Wormwood Pollen Extract (Glycero-Saline)—Mulford.

Parke, Davis & Company:

Alfalfa Pollen Protein Extract Diagnostic—P. D. & Co.

Kidney Bean Protein Extract—P. D. & Co.

Typhoid Vaccine (Prophylactic).

Typhoid-Paratyphoid Vaccine (Prophylactic).

E. R. Squibb & Sons:

Ovarian Hormone—Squibb.

Swan-Meyers Company:

Ampoules Ephedrine Hydrochloride—Swan-Meyers, 0.05 Gm., 1 cc.

Capsules Ephedrine Hydrochloride—Swan-Meyers, 0.025 Gm.

Solution Ephedrine Hydrochloride—Swan-Meyers, 3 per cent.

## SOCIETIES AND INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION

#### BUREAU OF PUBLICITY

May 23, 1927.

Meeting called to order at 4:45 p. m.

Present: William N. Wishard, M. D., chairman; J. A. MacDonald, M. D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held May 9 read and approved.

The release upon "Poison Ivy" approved for release June 6.

The following bills were approved for payment:

W. K. Stewart .....	\$0.95
Central Press Clipping Service .....	5.85

Totals .....	\$6.80
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Request for speaker to address the Fountain-Warren County Medical Society at Covington, the evening of June 2 received.

Letter received from the secretary of the sixth district medical society asking for speaker to give a short talk May 26 at the district meeting. Speaker obtained.

Report received concerning talk made by Bureau speaker at Evansville Kiwanis club.

Letter received from the American Institute of Baking giving the names of certain speakers to talk under the authorization of the American Institute of Baking who might be used to address lay meetings.

Letter received from the American Public Health Association enclosing a copy of the report of the committee on communicable diseases of the American Public Health Association. The Bureau wishes to compliment the American Public Health Association upon the report.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole June 6, 1927.

WILLIAM N. WISHARD, M.D.,  
Chairman.

THOS. A. HENDRICKS,  
Secretary.

#### BUREAU OF PUBLICITY

June 6, 1927.

Meeting called to order at 4:00 o'clock.

Present: William N. Wishard, M.D., Chairman; J. A. MacDonald, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held May 23 read and approved.

The following bills were approved for payment:

Central Press Clipping Service.....	\$10.00
W. K. Stewart Company.....	.95

Total .....\$10.95

Request received for speaker to talk before Kiwanis Club of Rushville, subject—The Under-Privileged Child.

Request received for speaker to talk on June 14 to the Knox County Medical Society. Secretary instructed to find what type of talk is desired.

The article—"Present Hay Fever Now" approved for release on June 13.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole June 13, 1927

WILLIAM N. WISHARD, M. D.  
Chairman.

THOS. A. HENDRICKS  
Secretary.

#### BUREAU OF PUBLICITY

June 13, 1927.

Meeting called to order at 4:45 p. m.

Present: William N. Wishard, M.D., Chairman; Murray N. Hadley, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held June 6 read, corrected and approved.

Request for speaker received from the Knox County Medical Society for a talk on pediatrics or obstetrics June 21.

Request for speaker to talk before the Newcastle Rotary Club, July 20.

Release on Smallpox read and suggestions made. Approved for release Monday, June 20.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole June 20, 1927.

WILLIAM N. WISHARD, M.D.,  
Chairman.

THOS. A. HENDRICKS,  
Secretary.

### TRUTH ABOUT MEDICINES

#### NEW AND NON-OFFICIAL REMEDIES

VIKING PALATABLE COD LIVER OIL.—Cod liver oil containing 0.2 per cent of benzaldehyde. Its fat soluble vitamin A content is such that 0.002 Gm. per day is sufficient to initiate growth in the albino rat. Sigurd E. Roll, Chicago.

RABIES VACCINE—U. S. S. P. (Semple Method).—An antirabic vaccine (*New and Non-official Remedies*, 1927, p. 347) prepared according to the general method of David Semple (phenol killed). Marketed in packages of fourteen syringes, each containing 2 cc. The content of a syringe is administered daily over a period of fourteen days. United States Standard Products Company, Woodworth, Wis. (*Jour. A. M. A.*, May 21, 1927, p. 1637.)

AMPOULES EPHEDRINE HYDROCHLORIDE — Swan Meyers, 0.05 Gm., 1 cc.—Each ampoule contains 0.05 Gm. of Ephedrine Hydrochloride—Swan-Meyers (*Jour. A. M. A.*, April 16, 1927, p. 1235) in 1 cc. Swan-Meyers Company, Indianapolis.

CAPSULES EPHEDRINE HYDROCHLORIDE—Swan-Meyers 0.025 Gm.—Each capsule contains 0.025 Gm. of Ephedrine Hydrochloride—Swan-Meyers, (*Jour. A. M. A.*, April 16, 1927, p. 1235). Swan-Meyers Company, Indianapolis.

SOLUTION EPHEDRINE HYDROCHLORIDE—Swan-Meyers, 3 per cent—A 3 per cent solution of Ephedrine Hydrochloride—Swan-Meyers (*Jour. A. M. A.*, April 16, 1927, p. 1235), preserved with chlorbutanol 0.5 per cent. Swan-Meyers Company, Indianapolis.

OVARIAN HORMONE-SQUIBB—A sterile, aqueous solution representing the physiologically active principle of the whole ovary. It is standardized in terms of its effect on spayed albino rats, one rat unit being the quantity necessary to induce estrus as judged by the smear method within three days in an ovariectomized, sexually mature rat weighing approximately 140 Gm. Ovarian Hormone-Squibb is administered by hypodermic injection. For recent cases of amenorrhea, artificial or natural menopause, from 50 to 100 units is given in a series of injections over a period of from three to five days. For long existing cases of amenorrhea, artificial or natural menopause, much larger doses may be administered. Ovarian Hormone-Squibb is supplied in 5 cc. vials, each cubic centimeter representing ten units. E. R. Squibb & Sons, New York. (*Jour. A. M. A.*, May 28, 1927, p. 1713)

#### PROPAGANDA FOR REFORM

RESIGNATION OF DR. GEORGE H. SIMMONS.—The Council on Pharmacy and Chemistry has accepted with regret the resignation of Dr. George H. Simmons from the chairmanship of the Council. Since 1905 Dr. Simmons has guided the activities of the Council. Before the establishment of the Council, the standard and quality of drugs were left entirely to the manufacturer, except for products in the Pharmacopeia. The rise of the proprietary medicine industry and the numerous attempts made to foist on the public and on the medical profession products without merit led to repeated calls from the House of Delegates of the American Medical Association for an official body to aid in overcoming this evil. As general manager, in February, 1905, Dr. Simmons first presented to the board of trustees of the American Medical Association a plan for the organization of such a body, and in accordance with their decision, arranged for



the first meeting, February 11, 1905. Under his guidance the Council has carried forward its work and to-day still stands as the only medium to which the physician may turn for the unbiased truth regarding proprietary medicines. In accepting his resignation, the Council extended him a vote of thanks, not only on its own behalf but also on behalf of all the medical profession of this country. (*Jour. A. M. A.*, May 7, 1927, p. 1483).

**"LIQUID ARVON" DERMATITIS.**—Liquid Arvon, put out by the R. L. Watkins Company, Cleveland, has been reported to contain 4.84 per cent of alcohol by volume, 1.49 per cent of glycerin, and 0.42 per cent of potassium carbonate, with salicylic acid present and probably resorcinol. This hair tonic preparation is reported to have caused severe dermatitis of the scalp. (*Jour. A. M. A.*, May 7, 1927, p. 1505).

**REPORT ON WINDOW GLASS SUBSTITUTES.**—The Council on Physical Therapy publishes a report of work carried out under its auspices, to determine the efficiency of certain window glass substitutes for transmitting the antirachitic rays of sunlight. The transmission of ultraviolet rays was determined both by spectroscopic analysis and by the biologic effects of the transmitted light on the growth of chickens. The following materials were tested: Vitaglass (transparent), Cel-O-Glass, Flex-O-Glass and Corning Glass. Vitaglass and Corning Glass are stated to be true glasses. Celoglass is composed of wire-mesh screen filled with an apparently celluloidinous material. Flexoglass is a thin, fairly loosely woven cloth treated with a paraffin-like substance. The Vitaglass and the Celoglass transmitted a large percentage of the sun's ultraviolet rays since the chickens reared behind these glasses showed similar development as those which received ultraviolet radiation from the artificial source. Chickens which received the sunlight through Flexoglass did not show the same growth as did the irradiated controls, but did gain more rapidly than those receiving sunlight through window glass. The Corning Glass was received too late for the biologic test, but from the spectroscopic measurements it is evident that this glass is equal to the best of those tests in its ability to transmit the antirachitic rays of the sun. The study leads to the conclusion that there are now available materials for glazing windows which do not possess the fault of window glass in excluding the health-giving rays of sunlight. (*Jour. A. M. A.*, May 14, 1927, p. 1562.)

**POISONOUS EFFECTS OF OXYGEN.**—In animal experiments a concentration of oxygen of more than 70 per cent of one atmosphere may produce symptoms of oxygen want. The manifestations are drowsiness, anorexia, loss of weight, dyspnea, cyanosis and, finally, death. Post-mortem examination shows that diffuse hemorrhagic edema had developed, with such injury to the diffusion membrane of the lung that, in spite of the increased head of pressure, the arterial blood remained unsaturated. With this knowledge of the effects of over-rich oxygen mixtures, oxygen may be used to greater advantage therapeutically. (*Jour. A. M. A.*, May 14, 1927, p. 1570.)

**INJECTION TREATMENT OF VARICOSE VEINS.**—In the face of growing enthusiasm for the treatment by injection of varicose veins of the leg and hemorrhoids, it is well to consider a recent report of a death after injection treatment of varicose veins. A man, aged 60, who had dilated veins of the left leg, was treated at short intervals with five injections of a 20 per cent sodium chloride solution. Serious symptoms developed, but the patient overcame these. However, about one month after the injection treatment he died suddenly of embolism of the pulmonary artery. One case proves nothing, but one disaster is an indication for caution. (*Jour. A. M. A.*, May 14, 1927, p. 1571.)

**EFFECTS OF CINCHOPHEN.**—Cinchopen is not directly depressant to the heart muscle. The circulatory collapse produced by the toxic doses is due to effect on the vagus and vasomotor centers. It occasionally produces local

irritation in the digestive tract, as indicated by anorexia, nausea, and other digestive disturbance. There may be scarlatiniform, urticarial or purpurial skin eruptions, and edema with fever. In large doses it may produce albuminuria, though less so than salicylate. The administration of sodium bicarbonate is believed to lessen gastric irritation. A liberal amount of water should always be given along with cinchopen. The use of neochinchopen obviates the gastric irritation and lessens the possibility of toxic effects. (*Jour. A. M. A.*, May 14, 1927, p. 1586.)

**PREVENTION OF SCARLET FEVER.**—The ideal procedure in the case of a child exposed to scarlet fever is to make a skin test to determine whether the child is susceptible or immune to scarlet fever and at the same time make nose and throat cultures to learn whether the child is infected with hemolytic streptococci. If the skin test is entirely negative, further preventive measures are not indicated unless the cultures show the presence of hemolytic streptococci, in which case the child should be kept away from other susceptible children. In case the skin test is positive the next step depends on the results of the nose and throat cultures. If these are negative and further exposure can be avoided, active immunization with toxin should be begun at once. If the skin test and the nose and throat cultures are positive, the administration of a prophylactic dose of scarlet fever antitoxin is justified. (*Jour. A. M. A.*, May 14, 1927, p. 1587.)

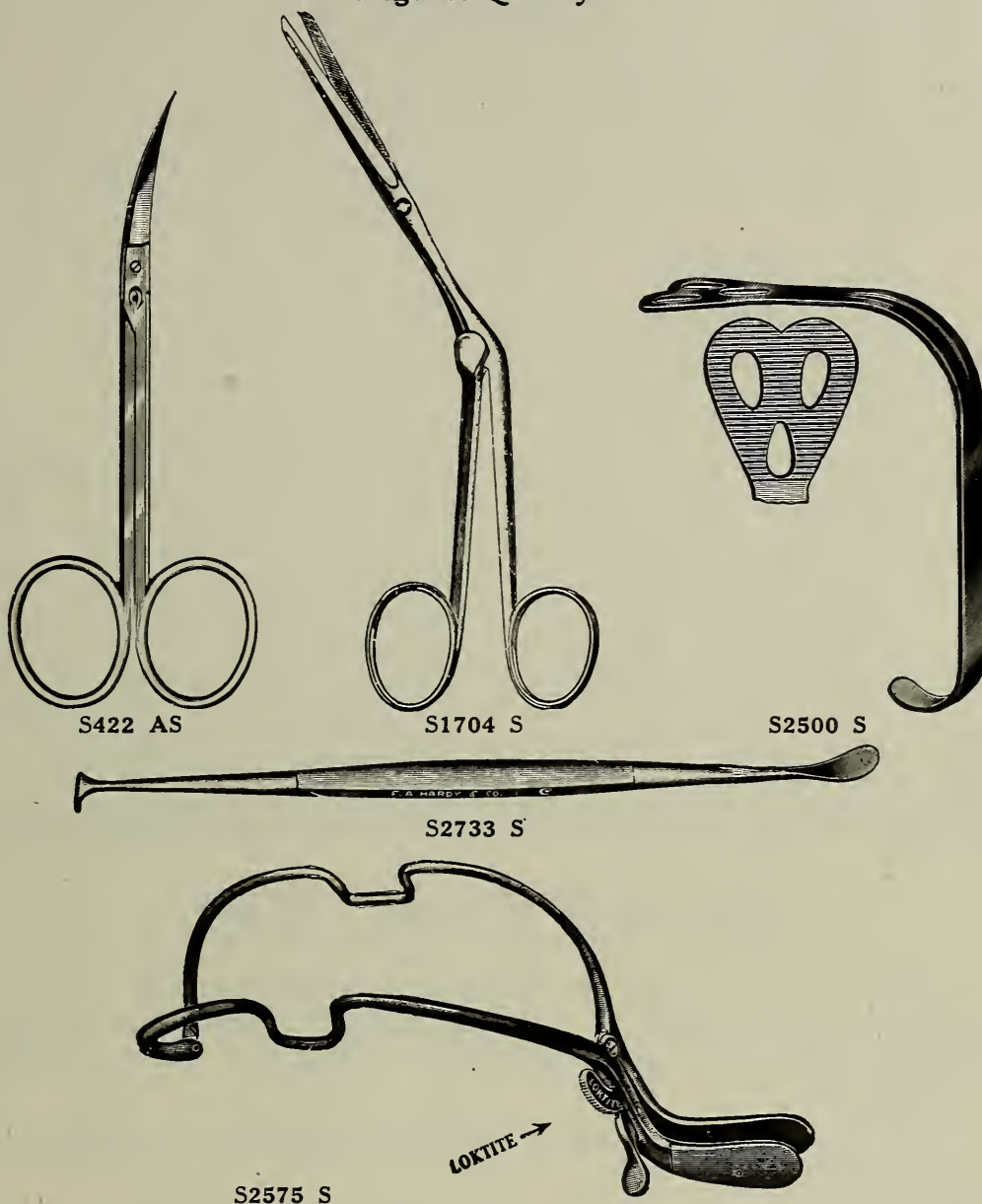
**LENS ANTIGEN.**—In 1924 the H. K. Mulford Company requested consideration of "Lens Extract," by the Council on Pharmacy and Chemistry, presenting as evidence for the value of the preparation the reports by A. E. Davis. The Mulford Company was informed that the evidence which it had submitted had been considered by the Council; that the referee to whom the product was assigned had consulted with a number of ophthalmologists, all of whom had agreed that the evidence for its usefulness was not acceptable, and that the Council had postponed the consideration of Lens Extract until more evidence becomes available to demonstrate its therapeutic value. Since then Dr. Davis has published two further articles. The Mulford Company has, however, not requested further consideration of its "Lens Extract", and the Council has taken no further action regarding it. (*Jour. A. M. A.*, May 28, 1927, p. 1749.)

**E. E. PADDOCK.**—According to available records, E. E. Paddock, of Kansas City, was born in 1867, obtained a diploma from the Kansas City Medical College in 1895, and was licensed in Missouri the same year. Since that time he has practiced in a number of Missouri towns. Paddock's principal quackish activity has been as an alleged specialist in gall-bladder disease. The follow-up paraphernalia conforms strictly to the orthodox methods of the mail order quack. Those who answer his "gall-stone cure" advertisements, but fail to send in an order, are circularized later by the Lyle Chemical Company detailing a home treatment for "painful menstruation." This, at least, was the case about a year ago. As an advertiser, Paddock has patronized such publications as the *Saturday Blade*, *Police Gazette*, *Chicago Ledger*, *Household Guest*, and the *Chicago Herald and Examiner*. (*Jour. A. M. A.*, May 28, 1927, p. 1749.)

**FELSOL.**—In the advertising of the American Felsol Company, Felsol is claimed to have the following composition: "Metozin 0.9 (containing phenazon 0.25, anilipyrin 0.4, jodopyrin 0.25), caffein 0.1, digitalis and strophanthus glycosides 0.0015 and the alkaloid of lobelia inflata 0.005." Felsol is a typical illustration of an irrational shotgun mixture. One of the claimed ingredients, metozin, is stated to contain phenazon (antipyrine), anilipyrin (a mixture of antipyrine and acetanilid) and jodopyrin (a compound of antipyrine and iodine). In addition to these multiple antipyretic ingredients, Felsol

(Continued on Advertising Page xx)

Some New Stainless Steel Instruments Now Obtainable  
Highest Quality



S422 AS.	Eye Scissors, straight and curved.....	\$3.00 each
S1704 S.	Knights Nasal Scissors .....	8.50 each
S2500 S.	Wedges Tongue Depressors, large and small.....	2.00 each
S2733 S.	Hurds Tonsil Dissector and Retractor.....	3.00 each
S2575 S.	Jennings Loktite Mouth Gag, large and small.....	15.00 each

For Sale By

# American Optical Company

Factories at Southbridge, Mass., Sales Headquarters, 70 West 40<sup>th</sup> St., N.Y.

Branches or Agents in principal cities

10 South Wabash Avenue  
CHICAGO

122 East Washington Street  
FORT WAYNE



**TRUTH ABOUT MEDICINES**

(Continued from Page 282)

is claimed to contain four other active drugs. The advertising refers to Felsol as a "harmless remedy" which may be given "for any kind of bronchial or cardiac asthma, without the necessity on the part of the physician to embark on long theoretical considerations as to the underlying cause of the attack." A product that contains preparations of digitalis, strophanthus and lobelia is not a "harmless" remedy. The recommendation for the indiscriminate use of this product is to be strongly condemned. A recent circular shows that the firm is increasing the danger of indiscriminate use by exploiting it directly to the public. (*Jour. A. M. A.*, May 28, 1927, p. 1750).

**BOOK REVIEWS**

**ULTRAVIOLET RAYS IN THE TREATMENT AND CURE OF DISEASES.** By Percy Hall, M.R.C.S. (England). Introduction by Sir Henry Gauvain, M.D., and Leonard E. Hill, M.D. Cloth, price \$3.75. C. V. Mosley Company, St. Louis, 1926.

Within the last few years it has been possible to isolate ultraviolet or actinic rays of the sun's spectrum, artificially, through the medium of the mercury quartz vapor lamp. It long has been known that the ultraviolet rays have a destructive effect upon bacteria, and it is knowledge of this fact that has led to the use of ultraviolet rays as a therapeutic agent. This book by Percy Hall presents the phenomena of ultraviolet light therapy in an instructive, and in the main, conservative manner, though the reviewer, who is a convert to ultraviolet ray therapy, is inclined to believe that the whole subject is treated in an over-enthusiastic way by the majority of writers. The indications for ultraviolet light therapy have been emphasized, and the reader will observe that there is not much left to the imagination when it comes to the question as to the kinds of

cases for which ultraviolet ray therapy is applicable. The author emphasizes the practical clinical phases and methods of treatment as dictated by the careful analysis of his personal experiences and observations. In fact, the author finds this form of therapy applicable to most any kind of disease condition, and we are not prepared to accept his dictum that such therapy has an appreciable effect upon deep-seated and inaccessible lesions, though it is possible, as the author says, and he claims to demonstrate it, that by the skin or other tissues, ultraviolet radiation possesses the property of greatly enhancing the bactericidal power of the blood, and of necessity this increases the defensive mechanism of the body. However, as the author well says, the power of the ultraviolet rays to cure surgical tuberculosis and rickets, to aid in the cure of wounds and improve the general health of weakly children, has been abundantly established, and it now remains to extend the use of these rays to other conditions of ill health.

We confess to having a growing appreciation of the value of ultraviolet ray therapy in many disease conditions, but we are conservative enough to believe, after many months of trial with ultraviolet therapy that the new therapy has a limited field of usefulness. Undoubtedly the author has had an extended experience, and his suggestions as to the apparatus to be used, the time limit, frequency of exposure, and conditions under which it is employed will prove a very valuable aid to a beginner. Certainly all that he says concerning the curative value of the ultraviolet rays is enough to arouse the enthusiasm of anyone who is seeking for success in relieving or curing human ailments. We are prepared to believe, as one of the collaborators of the book says, that the new form of treatment will be found both rich in promise and fruitful in fulfillment, though it is our candid opinion that the one who begins using ultraviolet ray therapy should guard against over-enthusiasm, and the rank exploitation of a therapy that when properly used may be of enormous value to physicians as well as patients.

# DEAR DOCTOR

About two years ago we conceived an idea that the Doctors of Indiana were in need of a **SURGICAL HOUSE** that could be depended upon to give **SERVICE, QUALITY AND VALUE RECEIVED.**

Today we are the fastest growing **SURGICAL HOUSE IN INDIANAPOLIS.**

We always have a complete stock of Surgical Instruments and Supplies at prices you can afford to pay. Also

Special Prices to the Profession on

**AKRON TRUSSES**

**SPONGE OR HARD PADS**

**ELASTIC HOSIERY AND ABDOMINAL BELTS**

**LEG, SPINE AND BACK BRACES**

**LEATHER JACKETS**

## "Akron Surgical House"

Indianapolis Branch of The Akron Truss Co.

217 MASSACHUSETTS AVE.

INDIANAPOLIS

# THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

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## THE MODERN INCREASE IN HEART DISEASE\*

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The subject of heart disease touches the medical profession very closely for few practitioners fail to come in contact with many victims of this morbid state, no matter what branch or specialty engages their attention. Nor is the subject one for complacent meditation, for a spirit of fatalism pervades the medical profession in regard to heart disease. This is the result of a certain *status quo* which was reached many years ago, one might almost say generations ago, which assumed the futility of medical effort except in the palliation of cardiac distress and the temporary improvement at times possible, but giving no hope of cure, with death sooner or later the assured outcome.

This is not a pleasant picture to contemplate but it reflects to a certain degree the state of mind of a large proportion of practitioners, not of choice, but from the teaching of most of our textbooks, as well as from disheartening personal experiences.

Much has been discovered in the way of a better knowledge of the etiology, pathology, physical signs and symptoms of heart diseases; instruments of precision have multiplied to show the more exact character, degree and progress; therapeutic measures of great value have been found to aid in treatment, but despite these efforts, this servant of the grim reaper goes on selecting his victims, crippling children, dragging down strong men and cutting short valuable lives with uncurbed frequency.

The greatest tragedy of all, and only too familiar, is to see a working man come to the physician or hospital with signs of a breaking compensation, men who to provide for themselves or families have been engaged in heavy work. Under proper treatment they often quickly regain compensation, and on leaving the hospital are warned not to return to heavy work.

They always do return to it, because the only trade they know is heavy work; and so they come

back to the hospital a second or third time, until, their cardiac reserve exhausted, they become hopeless charges upon the community with death as a merciful termination.

This oft repeated picture, according to Lewis Connor, stimulated the founding in 1916 of the Association for the Prevention and Relief of Heart Disease.

In the decade that has elapsed much important information has been gathered, but the greatest development has been in the recognition of the character and scope of the problem and the systematic foundations laid for its study.

As Haven Emerson says in his Shattuck Lecture, it is a very different situation than confronted preventive medicine a few decades ago in undertaking the fight, for example, against typhoid fever, malaria, or even tuberculosis. In these, the exciting organism was known and the manner of entrance into the human body fully understood, so that in the first two it was merely a matter of hygienic measures, cleaning up water supplies, protection from flies and mosquitoes so that typhoid and malaria have almost disappeared from civilized communities. Tuberculosis is more difficult to guard against, because of its universal distribution, its various modes of ingress, especially by dust infected air and the many economic factors of housing, diet, occupation and the like, but even so the death rate from this disease has been wonderfully lowered in the last twenty years.

In the case of heart disease, however, there are different etiologic factors, varying exciting organisms, and in the most common type of all in the young and early adult life, the form following acute rheumatic fever, not only is the organism not definitely known but neither is its mode of entrance established. Diseased teeth and tonsils, it is true, are pretty closely linked up in the etiology, but largely upon circumstantial evidence, and it is not known that these are the only atria of infection.

Thousands of people have attacks of tonsillitis, and even chronically diseased tonsils without developing rheumatism or rheumatic endocarditis, but the incidence of these conditions to some attacks of tonsillitis, clinically indistinguishable

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from other types, is sufficiently frequent to indicate a definite connection and probably a specific micro-organism.

It has been rather widely commented upon, and seems to be a general impression that acute rheumatic fever is not as frequent as in former years. Alexander Lambert states that in the admission to Bellevue hospital in 1907 of all patients entering, 2.45 per cent of them had acute rheumatic fever, and the subsequent years showed a steady decline until in 1920 only 0.52 per cent of all admissions were for this disease. The reason has been fairly generally assumed to be the result of the greater frequency of tonsillectomy in children. Whether this is true or not cannot be definitely asserted, but it is a matter for further study, and is one of the factors of the problem. There have been found so many and such varying problems, indeed, which bear upon the many phases of the question, that the chief aim now is in the gathering of all possible data on the subject of heart diseases to the end that they may be systematically analyzed and the pertinent facts correlated.

To do this more satisfactorily the interest of the entire medical profession must be enlisted in a country-wide program of cardiac observation and study.

#### FREQUENCY OF HEART DISEASE

What is the frequency of heart disease? It has been frequently stated that there has been a startling increase in disease of the heart; that deaths from this cause have so increased in frequency as to be a cause of alarm; that heart disease is causing more deaths than tuberculosis, cancer or pneumonia, and vital statistics are duly quoted in proof.

What are the actual facts? They are bad enough, perhaps not so bad in some respects, perhaps worse in others, than these statistics indicate, for the real prevalence in heart disease is not shown by our vital statistics nor do they give an accurate record of actual cardiac mortality. Many children and adults with heart disease die from infectious diseases, while some live out the ordinary span of life and, dying from other causes, leave no record of cardiac pathology. I have in mind a patient under my observation for over twenty-five years, and under the care of my predecessor for at least the same length of time, who had a mitral lesion, which crippled her seriously at times, but she managed to bring up several children and grandchildren, and finally died at the age of eighty-one years of cancer of the breast.

Not infrequently one reads in the daily papers of the sudden death of some individual, usually just past middle age from "acute indigestion," when the true diagnosis was probably angina pectoris, or other cardiac condition, while on the other hand, many sudden deaths are reported as cardiac failures when an autopsy would show the

cause to be quite different. It must be admitted that there is room for improvement in the accuracy of our vital statistics and it is in this that the co-operation of the entire profession is sought, and each individual can contribute important assistance.

In the reporting of deaths from the various infectious diseases, the latter are undoubtedly the primary cause of death, but in such cases the presence of a crippled heart may play an important part in the fatal termination, and such should be mentioned in the death certificate as a contributory factor. On the other hand, in older life many die clinically plain cardiac deaths where the underlying cause of the heart failure may be arterio-sclerosis or nephritis, and this should be indicated in the death certificate. If this were done more generally, it would be a great step toward showing more exactly the role played by heart disease in our current mortality.

From the best figures available at present, however, it is estimated that about 2 per cent of individuals up to early middle life have heart disease. Physical examinations of school children carried out in many states give about that figure for this age period. Haven Emerson quotes the results of the examinations of the food handlers of New York City as giving the same proportion (2 per cent). The statistics of several large life insurance companies show approximately the same per cent as a cause for rejection (Emerson).

In the late war, of the five million young male adults examined in the draft nearly 5 per cent were rejected because of cardiac disease. This is, however, very generally regarded as excessive, as the slightest suspicion of abnormality was sufficient to cause rejection, and large numbers of purely functional disturbances were undoubtedly included.

#### THE MORTALITY OF HEART DISEASE

The mortality of heart diseases, especially as compared with other diseases, furnishes very suggestive information, especially the variation in different life periods.

The following charts show very graphically the relative death rate of heart disease at different stages and particularly emphasize the mounting rate until the age period from middle life it becomes the one greatest assigned cause of death.

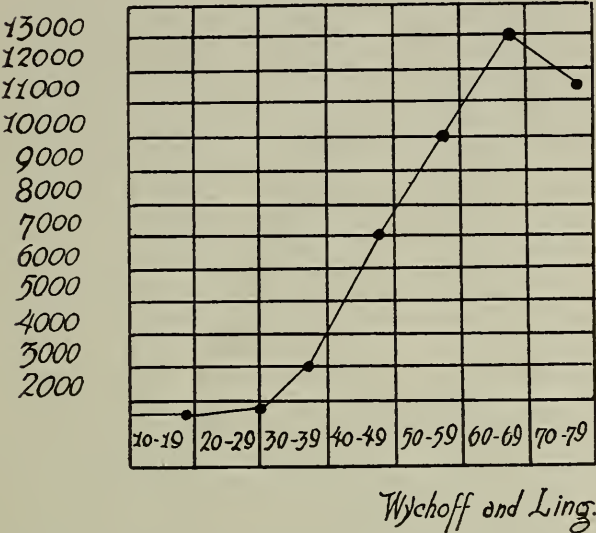
In order to make proper deductions from these mortality statistics, one must take into consideration various etiologic factors operative at different age periods and the ordinary progress in heart cases.

There are some which are most common in childhood, such as acute rheumatic fever, tonsillitis, chorea, and even vague joint discomforts, often called "growing pains", which have a definite causative relation to heart disease; scarlet fever and diphtheria occasionally are followed by cardiac lesions, while in some cases of heart disease

DEATH RATE PER 1,000 AT VARIOUS AGE GROUPS

	-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70
All Causes	31.8	3.5	2.0	3.0	4.3	5.6	7.7	11.6	22.3	44.8	103.4			
Heart Diseases	.14	.33	.41	.39	.38	.51	.79	1.47	3.91	10.9	30.10			

H Emerson



one can obtain no history of a primary infection. In the latter, the pathology is so analogous that it is fair to assume that there is a primary infection but of so mild a character as to be over-looked in the history given by the patient or the parents.

The involvement of the heart following these infections is rarely immediately fatal, and in fact, the first onset is so mild, or is so masked by the more noticeable symptoms of the primary infection, that it is frequently overlooked. The young heart muscle is resistant and recuperative; compensation is quickly established, and the child has an excellent prospect of living to adult life provided that it is surrounded by good hygienic conditions, properly nourished, restrained from excessive activity and escapes recurrent attacks or exacerbations of rheumatic or allied infections. The reverse of these, an occasional virulent infection, bad hygienic surroundings, mal-nutrition, excessive exercise and recurrent infections account for the mortality, which as has been shown, is relatively low in childhood and adolescence.

In adult life these infections, even acute rheumatic fever, become less and less frequent until they are very rare after fifty years, but another infection, syphilis, becomes an important etiologic factor in increasing the quota of cardiopaths. These increase the morbidity and the potential mortality, but the actual increased mortality is chiefly the result of social and economic factors; it is the necessity to labor, often hard labor during this age period which brings about the cardiac break-down.

Progressively, therefore, toward middle age, more and more patients with hearts damaged by rheumatic infections with the addition at this time

of life of those crippled by syphilis, die clinically heart deaths, so that the statistic increase is readily explainable.

After middle life, especially after fifty and fifty-five, systemic and organic changes such as hypertension, beginning arterio-sclerosis, nephritis, and the pulmonary emphysema throw increasing burdens on the heart muscle, and many with damaged hearts as already mentioned, who have weathered the storms of middle life, give out in increasing numbers.

To these, however, is added a third group of cases of which, from the reports of the pathologic findings, I believe the great bulk are practically exhausted hearts, worn out from overwork in striving to maintain the circulation through sclerotic vessels, or against vascular hypertension, through emphysematous lungs, sclerotic kidneys or secondary to toxic goiter. It is the featuring of this group, with no history of rheumatism, syphilis or other known infections that accounts, in my opinion, for the tremendous rise in cardiac deaths in this age period, and the alleged great increase in heart disease so often referred to in recent years.

As a matter of fact, the vital statistics of Ohio show a *decrease* in recent years, in the number of cardiac deaths in the younger age periods as compared with former years. This would indicate that the rheumatic and allied types of infectious endo-carditis are perhaps decreasing in frequency, or else better care is being given to cardiac cases and lives are being prolonged until the greater burdens of middle and past middle life finally overwhelm the impaired organ. A third corollary is, that the larger group referred to as occurring in past middle life, while manifesting the clinical signs of failing circulation and unquestionable heart deaths are really exhausted rather than diseased hearts and the actual disease is in quite other systems or organs.

The study of heart disease, therefore, especially the question of prophylaxis, must embrace these three distinct types all of which may present terminal stages clinically almost identical, but entirely different in etiology.

The prophylaxis of the rheumatic infectious type is very seriously complicated by the fact that the causative factor is as yet not established, hence the difficulty of barring its entrance is apparent. It is assumed that the port of entrance is through the naso-pharyngeal tract, and the increased frequency of operative correction of diseases of this tract in childhood by the removal of adenoids and tonsils has probably been the chief factor in the reduction in the acute rheumatic fever in Bellevue hospital as recorded by Lambert, and the reduction in the cardiac mortality in Ohio. But this is not sufficient, as shown by the fact that about 2 per cent of school children



still have heart disease and many of these have developed in children who have had their tonsils and adenoids removed. One cannot therefore urge the universal removal of tonsils as a sure prophylactic measure, but certainly in the presence of adenoids or chronically diseased tonsils, we should urge their removal as rendering heart infection just so much less likely, to a degree well worth the risk of operation. Secondly, much greater attention should be paid to chorea, especially in the milder forms and to the vague pains of childhood, so often dismissed casually as "growing pains" and in such the investigation as to foci of infection, especially in the naso-pharynx should be carefully searched for, and if found corrected, usually by operative procedures.

The main hope for this group of cases, however, lies in the final identification of the causative organism, and if possible, the production of an immunizing serum. The latest claimant to this distinction is Dr. Small, of Philadelphia, who believes a streptococcus, which he calls the streptococcus cardio-arthritis, is the exciting factor. He is conservative in his claims, and is continuing his research, and we shall have to await the results of further investigation.

The prophylaxis of the second type is wholly that of syphilis in general, which need not be considered here. A fact which has added to the failure to recognize many as of syphilitic origin is that in many cases, especially those of longer duration, the Wassermann test is often negative. The cardiac condition often develops ten or more years after the primary infection, when all other clinical signs may have disappeared, and the relatively few remaining spirochaeta localize in the aortic wall, especially in the vicinity of the aortic valves where the tissue is poorly supplied by blood and there is insufficient systemic involvement to give a recognizable Wassermann reaction.

In all these the location of the lesion about the aorta, and the clinical history of certain or even probable infection, or having been "cured" of syphilis, are of greater significance than a negative Wassermann test.

The prophylaxis of the third group of exhausted hearts is a very complicated problem; it must include many economic factors of occupation, living conditions, infectious diseases, especially pneumonia and influenza, over-weight, lack of proper exercise and mental worry to some degree but above all, arterial hypertension, arteriosclerosis, nephritis and pulmonary emphysema.

I have purposely omitted focal infections because, while such play a part in a certain unknown per cent of cases, I believe their importance has been exaggerated and has led to the great abuse of the word myocarditis. That such a condition may exist cannot be denied, but in the experience of most pathologists it is really very rare, and

anatomical findings in the majority of heart deaths are merely muscular hypertrophy with dilation, with or without thickened or distorted valves, and with sometimes sclerosis along the branches of the coronary arteries.

The term myocarditis should be restricted to the relatively few instances of definite infection, while some other term, perhaps myocardial-exhaustion, should be used for the ordinary clinical heart case. This may seem an unnecessarily fine differentiation, but such is, in reality, not the case, for a more general realization of this distinction should lead to a wider appreciation of the exact condition in the majority of cases, an overworked, exhausted muscle, and the correlating deduction as to the best therapeutic measure indicated. The often prompt improvement following the use of digitalis in cardiac decompensation has undoubtedly led to its abuse, and in many instances actually hastened a final catastrophe. A wider recognition of the presence of cardiac exhaustion should lead to the greater appreciation of the need of *rest* in the treatment of such cases, and above all as a prophylactic measure the fitting of the load to the handicapped or over-worked organ, which would save or prolong lives otherwise unnecessarily cut short.

#### SUMMARY

The interest of the entire medical profession should be enlisted in a country wide program of cardiac observation and study.

Cardiac deaths as a whole have increased in number in recent years, but this increase is entirely in middle and past middle life.

There are three distinct groups of heart diseases from an etiologic point of view: First, the infectious, secondary to rheumatism, chorea, and allied diseases, and occurring chiefly in the young; second, the syphilitic, occurring chiefly in middle life; frequency not definitely established, but estimated by some at approximately ten per cent; third, the exhausted heart from pathology of other organs or systems.

The problem of reducing cardiac mortality (and morbidity) is a very complex one, in that it must take into consideration not only the rheumatic and allied infections, and syphilis, but also the prevention of pulmonary, vascular and renal diseases.

At the present time substantial results in prolonging the lives of cardiopaths will result from the wider recognition and greater appreciation of the fact that a decompensated heart is more often a *worn out* heart than a *diseased* heart.

Lastly, the increase in mortality rate ascribed to heart disease is not due to heart disease *per se*, but rather to increased frequency of disease of related organs and systems due in the large part to changed economic and other factors of modern life.

## PYURIA—ITS INTERPRETATION\*

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At first glance one might be surprised that such an apparently familiar subject should have been chosen to be presented this evening. My reason for doing so is that pus or blood in the urine have assumed an entirely different significance at the present day. The more frequent examinations for purposes of insurance, the sending of urine specimens to laboratories at regular intervals by the business men of our large cities and the more thorough study of cases presenting themselves to the rank and file of our profession, are a few of the many reasons why pyuria and hematuria are no longer passed by without any systematic attempt being made to search for a source.

I have chosen this subject not only for the reasons just enumerated but to impress upon the general practitioner who is often the first to be consulted, of the necessity of a careful consideration of the fact that the presence of pus or blood in the urine is a danger signal which cannot be disregarded. The present day diagnostic resources of the urologist enable us in practically every patient to ascertain why pus or blood are present and to suggest treatment at a period when years of suffering or perhaps an early death can be avoided. I have taken up the subject of hematuria in a recent contribution<sup>1</sup> and hence propose only to discuss that of pyuria.

*Definition of Pyuria:* In the paper on hematuria<sup>2</sup> attention was called to the fact that the presence of red blood cells should be considered abnormal except (a) after excessive meat diet and (b) after severe physical exercise. This is not true of the presence of leucocytes. Repeated studies show that one finds five to seven leucocytes to the high power field in the urine of normal persons. The presence of a larger number may only be evident on microscopic examination but as a rule it is seen in the specimen without such aid. A convenient division as to the degree of such turbidity is into slight, moderate and severe.

It would seem to be superfluous to call attention to the fact that not every turbidity is due to pus in the urine. Experience, however, has taught me that some practitioners are apt to overlook the possible turbidity due to urates or phosphates. Heating the specimen and adding a few drops of a 10 per cent acetic acid solution will soon cause the apparent turbidity to disappear. Another cause of cloudy urine is due to the presence of micro-organisms in very large number without many if any pus corpuscles being present. Examination under the microscope will soon eliminate this cause of turbidity.

Changes due to infection in the genito-urinary tract in the male and in the urinary tract of the female may be quite advanced before they give rise to symptoms which cause the patient to consult a physician. It is the "silent" pyuria cases which I desire to especially direct your attention to and if this paper does not accomplish more than to impress upon you the necessity of the routine examination of the urine in every obscure case, it has failed to accomplish its purpose. It is just these silent pyurias which are usually overlooked and so one of the seats of focal infections remains undiscovered.

Cases of pyuria, for clinical purposes, may be divided into two groups:

(a) Those in which there are accompanying localizing symptoms or objective findings, such as pain (localized or radiating), fever, chills, rigidity, swelling, etc.

(b) Those in which there is an absence of such localizing signs. In some the presence of arthritis, neuralgia, myalgia, or symptoms of more or less severe generalized infection lead to an investigation of the urinary tract as a possible source. Unfortunately the naked eye presence of blood in the urine is much more apt to attract the attention of both patient and physician than that of turbidity.

The degree of pyuria is usually a fair criterion of the severity of the lesion in the genito-urinary tract. There are cases of severe generalized sepsis due to pyelonephritis without much pyuria and with practically no localizing signs. One should make it a rule to think of the genito-urinary tract both in children and adults in every case of persistent or recurrent fever without localizing signs. There are but few other sources of such a clinical picture. Aside from these non-localizable cases of acute and chronic urosepsis in which the pyuria is minimal and out of all proportion to the severity of the clinical picture, the amount of pus is in general a fairly accurate measure of the underlying pathological changes in the involved structures.

*Sources of Pyuria:* Whenever pus is found in the urine a search should be made as to its source, whether or not it is accompanied by other symptoms. I have observed a number of cases in which a valuable life could have been prolonged had more importance been ascribed to a persistent practically symptomless pyuria.

The search for the source is beyond the scope or facilities at the disposal of the general practitioner or even the majority of surgeons, gynecologists and internists. It has become the special work of the urologist to make this search for the source of a hematuria or pyuria and the sooner such a case is referred for his opinion, the more

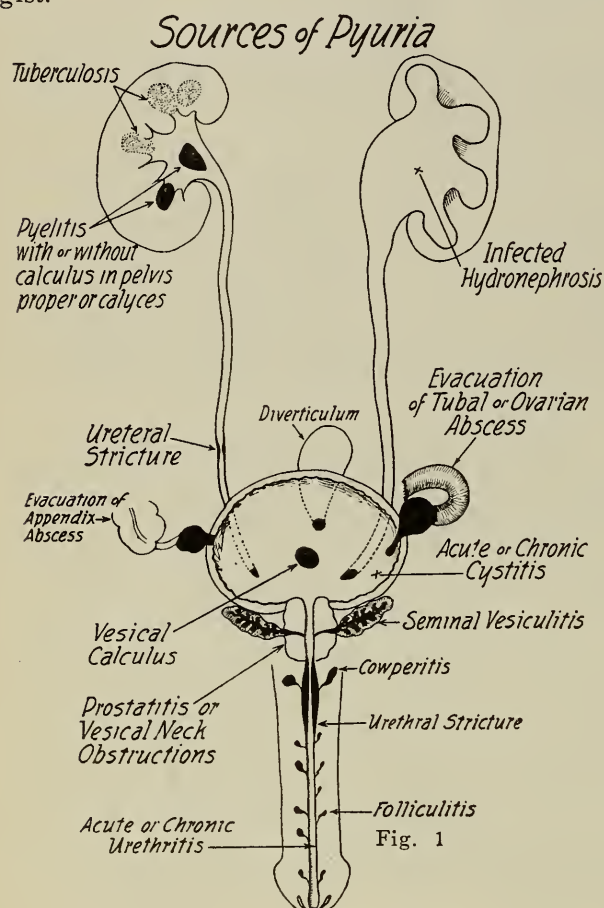
\*Presented before the Indianapolis Medical Society, January 25, 1927.

1. *Jour. Amer. Med. Asso.* 86,825, March 20, 1926.  
2. *Loc. cit.*



satisfactory will be the results both for the patient and physician.

The problem is not always a simple one even for the urologist. Above all, he should approach such a study with an open mind, i. e., not be influenced by symptoms alone but investigate in a most thorough manner every portion of the genito-urinary tract. The verdict should not be given until every particle of evidence has been carefully considered and put together. To have the patient pass his urine into two, three or even five glasses and attempt to localize the source of pus by this test is a very inaccurate method in the light of the present day facilities at the disposal of the urologist.



Just as in hematuria, the detection of the lesion which is the source of a pyuria may be either a very simple task or one that exhausts every diagnostic resource. As was stated at the beginning of this paper, the pyuria may be gross, i. e., visible on slight inspection, or only microscopic. We must be equally conscientious in both instances.

We will omit reference to cases of acute specific (gonorrheal) and nonspecific urethritis and their possible complications in the lower urinary tract as seen in Fig. 1. The two or three glass test and the local symptoms make the topical diagnosis a comparatively easy task. In cases of acute infections of the bladder, symptoms such as frequency, pain, etc., enable one to determine the seat of pyuria at a comparatively early period.

We must bear in mind, however, that few cases of cystitis are primary, the majority being of renal origin or secondary to some obstruction in the urethra or bladder neck with resultant stagnation of urine which always favors infection by the hematogenous route, usually from the kidney. Acute infections of the upper urinary tract (ureteritis or pyelonephritis<sup>3</sup>) are not as easily detected as the source of a pyuria as one would think. There are many cases of hyperacute and acute infections of the upper urinary tract without any localizing signs, i. e. nothing indicating that chills, fever and symptoms of urosepsis are dependent upon some lesion there. We will see shortly that this is equally true of less fulminant infections and especially is this true of pyuria of infants and young children.

In the majority of cases of upper tract involvement there are localizing symptoms such as pain, rigidity, etc. One must always be prepared to find a relatively small amount of pus in the urine in apparently severe cases of acute renal infection. In both the latter as well as in the more slowly progressive cases, the degree of pyuria is no criterion of the extent of damage done by the infection. My object in directing your attention to the importance of an early interpretation of the source of a pyuria was to speak especially of this finding in connection with more subacute and chronic cases with or without symptoms referable to the genito-urinary tract.

In the enumeration of the sources we will take them up in the order in which a search for such an underlying lesion would be undertaken.

1. *Urethral and paraurethral sources:* These include search for evidences of persistence of infection originally due to the gonococcus superseded by the ordinary pus producing organisms or a primary nonspecific infection. A glance at Figure 1 will refresh one's memory as to possible sources in the shape of soft or hard (true strictures) infiltrations of the anterior or posterior urethra, infections of the urethral glands (Littre) and lacunae, cowperitis, prostatitis and seminal vesiculitis, periurethral abscess, etc. It is beyond the scope of this paper to describe how such a topical diagnosis is made but it may be said in passing that one of the most common sources of the persistence of pyuria especially of minor degree is a chronic prostatitis, a vesiculitis or an overlooked infiltration of the wall of the bulbous or membranous portion of the urethra. Many of these cases are latent so far as symptoms referable to the genito-urinary tract are concerned. It is only during a thorough search for the focal infection underlying recurrent attacks of arthritis, myalgia, neuritis, etc., that such a source of pyuria is detected.

3. This term is employed because it is gradually superseding that of pyelitis. In practically every such case there is involvement of the parenchyma as well as the renal pelvis and its calyces.

2. *Vesical sources:* One must never consider one's search ended even after the seat of a pyuria has been localized in the bladder without taking into consideration a possible stricture of the urethra. Some form of obstruction at the vesical neck, the presence of calculi or of a neoplasm or of diverticula and finally of upper urinary tract infection may be responsible for the condition. In other words, a primary cystitis is infrequent. One word in regard to obstructions at the bladder outlet. We have learned that these can be found as responsible for a pyuria, at all ages. Beer, C. G. Mixter, Hyman and others have recently emphasized the necessity of looking for both valvular and similar obstructions in the urethra and for contracture of the vesical neck in infants and children. In the latter as well as in adults the urologist is constantly looking for openings of diverticula, (Fig. 1) of congenital origin, as potential sources of pyuria. In adults, prostatic adenoma is no longer regarded as the only anatomic form of vesical outlet obstruction. Median (fibrous and glandular) bar formation as pointed out by Alexander Randall, contracture of the orifice and enlargement due to adenoma of the glands of Albarran, have been assigned places of equal importance with that of prostatic adenoma (formerly wrongly termed "hypertrophy"). The retention of urine which results from either such a mechanical obstacle at the vesical neck or of an atony of the detrusor muscle, favors localization of the organisms constantly present even in normal urine. We must never omit an examination of the nervous system to explain retention of urine not due to mechanical causes. These so-called "cord" bladders are often, however, not due to disease of the spinal cord. I cannot refrain from making a plea for thorough search for the above causes of urinary retention before an attempt is made to treat a pyuria of vesical origin or to remove calculi located there.

Other common sources of primary vesical pyuria are granular and similar types of chronic cystitis, neoplasms (both benign and malignant), multiple shallow diverticulæ and communication with perivesical foci of infection (rupture of appendiceal, tubovarian and similar abscesses into the bladder).

Cystoscopy alone or urethrocystoscopy aided by plain radiography and cystography will enable one to localize a pyuria as being of vesical origin far more rapidly and accurately than by any other method.

*Renal and ureteral sources:* These are grouped because it is not always an easy task to distinguish whether an infection is predominantly renal or ureteral. In a fairly large proportion of cases one can localize the source of the pyuria as being in the upper urinary tract by the appearance of the ureteral orifice or by observation of a thin or thick purulent efflux from the corresponding side. We cannot depend upon these findings

alone but call to our aid the use of bulbous or similar bougies in order to determine the presence of ureteral stricture, of plain radiography supplemented by ureteropyelography and similar methods routinely used in such cases by every urologist.

The search for the source of an upper urinary tract pyuria has been so ably developed by these specialists that it is the duty of every practitioner to have cases of pyuria examined in such a manner at the earliest possible moment.

The most common renal and ureteral sources of pyuria are the following:

1. Strictures of the ureter of pre- or post-natal origin.
2. Calculi or neoplasms.
3. Nontuberculous infections.
4. Tuberculosis.

Just a few words concerning several of these. One can no longer deny the existence of strictures of the ureter and although one may not agree with Hunner that they occur as frequently as he believes, yet a search for their presence should be made not only in adults but in children as well. There are many cases of persistent pyuria in infancy which are due to overlooked congenital narrowings of the ureter.

In regard to renal and ureteral calculi we are accustomed to think that they always give rise to symptoms indicative of their presence. Nothing could be more erroneous, so that whenever an infection (due to ordinary pyogenic organisms) of the upper urinary tract does not respond to treatment one should suspect that a ureteral or renal calculus is present. To demonstrate this is not always a simple task when one recalls the fact that about 15 per cent of such calculi do not yield a shadow on the radiographic film.

In regard to pyuria due to non-tuberculous infections the localization and estimation of the degree of damage which has been done is not very difficult when our present-day urologic methods such as ureteral catheterizations, ureteropyelography, blood chemistry, functional tests, etc., are applied.

One of the most difficult problems offered by renal tuberculosis is as to localization and diagnosis. About 65 per cent of all cases present clinically under the picture of a chronic cystitis, hence if a pyuria persists with symptoms incident to this affection, one should always suspect a possible renal tuberculosis. In about 10 per cent of the cases of this disease a symptomless pyuria is an outstanding feature. It is to this relatively small group that I would especially direct your attention, because so many are permitted to progress until both kidneys are involved. When one recalls that in about ninety per cent of all cases of renal tuberculosis the disease remains confined to one kidney for a relatively long period, two to three years, it is self-evident that early diagnosis would result in saving lives since we



know that nephrectomy will result in about 60 per cent of cures if the disease is still unilateral.

It has been impossible in this paper covering such a wide field, to take up in a detailed manner any individual disease. Let me leave, however, one impression with you and that is, every pyuria should be investigated as to its source through a complete urologic study.

### ETHMOIDITIS AND SPHENOIDITIS\*

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The subject will be discussed under the headings of acute catarrhal; acute suppurative, open and closed; chronic suppurative, open and closed; chronic catarrhal or hyperplastic ethmoiditis and sphenoiditis, and mucocele.

Acute catarrhal inflammations here constitute a part of acute colds and stand out as important principally when these tissues or parts of them suffer the brunt of an attack or continue affected after other regions are convalescent or recovered. The serous discharge being excessive denotes involvement of large surfaces and as the ethmoid membranes are said to comprise at least one-half of the respiratory surface of these regions inferentially they are suspected of being involved. There is a feeling of marked fullness and obstruction of the nasal passages and naso-pharynx and more especially the latter when the sphenoid is involved. The condition is bilateral except in such cases as mark acute exacerbation of a chronic infection in a restricted area. Headache especially at the base of the nose and extending to the orbits, anosmia, dry throat due to mouth breathing, neuralgic pains, general malaise, dulled hearing from faulty ventilation of the middle ear, in fact all the symptoms of acute cold of which it is a part.

The acute congestion around the cell openings makes a retention increasing obstruction with discomfort and pain. In the sphenoid the deep-seated headache through the temples or back of the orbit or at the vertex is at times very severe and accentuated in stooping or exertion. These symptoms are further increased in complete closure of outlets resulting later in acute empyema.

The point of chief importance seems to rise just here with a subsidence of the general symptomatology and a continuation of those features relating to the regions or parts of them here being considered. The patient is freed of his malaise, most of or all headache, anorexia and other general phenomena of acute cold but the fullness in the nose continues in one side or both, the serous discharge while reduced in volume continues, likely somewhat thickened and the headache before general now becomes more localized. A postnasal discharge may be noted and the obstruction is observed to be continuous or more nearly so.

Definitive symptoms are difficult to name because the condition is so apt to be associated with other pathology and all the general symptoms are analogous to those of acute inflammation in surrounding tissues and the other nasal sinuses.

Before these changes the examiner is at serious disadvantage—the tissues do not shrink well under applications and the exquisite tenderness precludes much of palpation. And in addition much of manipulation of the tender acutely inflamed tissues is useless meddling and may do real harm by increasing and prolonging the pathology.

The process may soon change to an acute purulent one and the symptomatology usher in due time features of sepsis belonging to it. Open suppuration has, of course, as its chief and most common feature a pustular discharge, anteriorly in the main if only the anterior ethmoids are involved, mostly posteriorly if the posterior cells with or without the sphenoid exclusively harbor the infection. One sided suppuration almost uniformly points to sinus infection.

The headache becomes accentuated and is frequently of a neuralgic type. Ocular symptoms with inability for concentrated vision are almost uniformly present. Anosmia in degree depending on the swelling and obstruction as also dry throat with glazed appearance from the discharge and a bad taste in the mouth all combine further to increase the patient's discomfort.

The value of a correct diagnosis rarely to be overestimated here assumes an acme of worth and in seeking it inductive findings must form the main reliance.

Thorough anesthesia and shrinkage are essential for the vision and palpation necessary in examination. It is, however, of advantage to observe the coloring and texture and discharge and to palpate with probe before the conditions are modified by their application and therefore it is best done by stages, each one providing further view and accessibility to unmodified regions.

In these acute open processes the mucous membrane is hyperemic and velvety with some petechiae and pearly elevations marking points of greatest irritation. Discharge which on first view seems quite general when wiped away may be seen reappearing at particular points. With the middle turbinate held over against the septum the three particular points of discharge for the anterior ethmoids may be interrogated. If only the uncinat cells are involved after wiping the discharge away it will reappear only in this location and likewise for the posterior section emptying at the lower end of the hiatus and the frontal cells high up close to the opening of the frontal duct. Of course any or all of the anterior ethmoids with or without the posterior group including the sphenoid may be involved. Repeated negative pressure alternating with cleansing and close scrutiny will complete the picture in many cases.

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The maxillary and frontal sinuses here need interrogation. The surest and best method for the maxillary if at all suspected is to puncture and wash out first having cleansed the area of return flow. Especially useful immediately after puncture is it to apply suction to the canula. In the absence of other means in the home the simple bulb ear syringe applied to the canula may suffice. If the content is pustular then further observation waiting a period of time with hiatus packed over antral opening is necessary to determine whether it is acting simply as a reservoir.

If the frontal duct can be entered with a canula suction applied will quickly determine secretory conditions there. Failing to find entrance packing off the region for a few hours may show on removal more or less abundant discharge, which for its diagnosis is positive and final.

In chronic cases we do not hesitate to break through any of these cells to clear diagnosis at once but in acute cases many have found sorrowfully that the procedure is not without danger.

Discharge in superior meatus showing involvement of posterior group maybe including the sphenoid is not so easily traced. Unless there are urgent indications especially of sepsis demanding it we are not justified in removing the middle turbinate in these acute conditions for further diagnostic evidence. If acute closed empyema of the region is complicating and all other means do not locate it, in view of the necessity apparent such additional search may be cautiously undertaken. Here the writer would suggest that a consultation be sought and the family informed of the chances to be taken.

Acute closed empyema of the ethmoid and sphenoid structures have pain as their outstanding symptom. Usually though not always localized to the region it may reach great severity and be described as dull, throbbing or lancinating in various degrees to the most excruciating. The orbital regions are particularly involved both through direct pressure and nerve association. Eye movements are painful and the vision often disturbed especially with diplopia. The acute sphenoid empyema may give rise to such deep-seated pain through the temples and back of the orbits and also at the vertex as defies large doses of opiates for relief. Swelling of the orbital tissues and reddened conjunctiva with profuse lachrymation fill out the picture of marked distress. Of course, along with these symptoms go those of a general nature, anorexia, sleeplessness, more or less elevation of temperature and the like.

It is generally unilateral and the location restricted to the anterior or the posterior group of cells and with the latter belongs the sphenoid though it alone may be affected. If in the anterior group it may be easily marked by the tumor-like enlargement and displacement of other tissues, es-

pecially the turbinates. The projection is more often inwards but at times it is towards or into the orbit. In point of fact this outward projection may be the first determining evidence in the diagnosis and the specialist frequently then has his first contact with the case. Puncture for diagnosis when possible without too great disturbance should be made from within. If that seems not feasible then aspiration from without is used to complete the diagnosis.

If empyema of the sphenoid is conjectured from the subjective and objective symptomatology the closed nasal opening should be sought for irrigation and failure to enter it indicates puncture of its anterior wall either of which may complete the diagnosis. One exception emphasized by Hajek is sphenoid pyosinus, the cavity in peculiar contours being a reservoir for posterior ethmoid suppuration. Only repeated observation and tracing of discharge can determine this.

All in all puncture is the final test in diagnosis of enclosed empyema.

Transillumination is of but little if any value in ethmoid and sphenoid search. X-ray has taken its place of indisputed superior value.

The naso-pharyngoscope is frequently of signal use. The laryngoscope to search the posterior nares and pharynx especially with the lilliput arc lamp may reveal conditions of greatest importance.

Chronic open suppurative ethmoiditis and sphenoiditis as the acute open variety has purulent discharge as the most prominent symptom. According to location of the process the discharge will be principally anterior or posterior. Likewise, of course, the crust formation, to the patient frequently the most annoying complaint, will be blown in slugs into the handkerchief or clinging about the choana produce nausea and gagging to expell them posteriorly. Headache is by no means constant either in presence or location but the general health is frequently impaired. Neuralgias are not at all uncommon and distal joints and tissues may be subject to infection from this focus. Repeated acute exacerbations makes the subject think that he is a marked subject of acute colds in the head.

Differing from a pure acute inflammation the nasal discharge in such cases is almost at once purulent and this is a diagnostic point of some importance and used rightly may excuse an inability to provide prompt relief to a complaining patient.

At times the crust formations produce fits of violent sneezing and either this or other forcible dislodgement of crusts may give rise to epistaxis either in form of constant tinging of discharge or profuse flow. A dry pharynx is a very frequent source of complaint especially when the posterior group is involved.

Not so often as in the chronic closed empyemas or in the chronic hyperplastic type but there may



be reflex asthma and disturbances of vision. This latter in open suppuration is attributed only to absorption. The pharynx and also the larynx in this type of inflammation give the sufferer great cause of complaint. Crusts and discharge are expectorated, there is a bad taste in the mouth and a bad odor and nauseated gagging and occasionally vomiting.

The diagnosis here is subject to the same procedures outlined in the acute process with some important additions. The location of crusts, *properly interpreted*, points the diagnosis in many cases but that interpretation cannot be trusted until proved. The examiner must trace the discharge to its sources. He is not so hampered here as in acute suppuration and may make necessary removals of obstructing turbinates and septal deflections and the like to pursue complete diagnosis. This is not to recommend ruthless destruction as the future physiology of the nose must be kept always in mind. Polypoid degeneration and polypi by their locations and character give valuable information as to the process and its source. The view of Skillern that these growths may be both primary and secondary in pathology seems most in accordance with chronic open suppuration at least. They should be removed with impunity in seeking the source of discharge. The methods and differentiations suggested in diagnosing acute suppurative ethmoiditis and sphenoiditis will not be repeated for this form or the succeeding section on chronic closed empyema.

In chronic closed empyema of the ethmoids and sphenoids there is a slow development of the same features that characterize the primary acute process. Along with them go, as implied before, more frequently the phenomena of focal infection and reflex disturbances especially asthmatic manifestations. Locally the organs and parts most affected have already been denominated in the lines on acute closed empyema. The distal conditions of focal and reflex disturbance are so varied, manifold and inconstant that an attempt at mere enumeration would be out of place.

A chronic empyema may be changed into an acute one at any time with all of the symptoms of the latter appearing precipitately.

Hyperplastic ethmoiditis and sphenoiditis are essentially chronic processes in which the symptomatology is wide and varied. There are frequent acute exacerbations, often from trivial causes, serving usually to intensify and to multiply the subjective manifestations. Headaches and eye disorders in various forms so thoroughly

studied by Sluder are chiefly characteristic. Discharge may be so slight as to escape the notice of the patient and most difficult to find by the examiner or quite profuse of either serous or pustular type. Changes in the quantity and character of the discharge are frequent. It is not essentially productive of obstruction of the airways excepting cases with abundant secondary polypi. In the ethmoid region sneezing at times in marked paroxysms may render the subject miserable. The headaches are mostly of neuralgic type and may be in any one or more regions supplied by the nerves or ganglia in contact with the ethmoid and sphenoid regions. The ocular disturbances are mostly sensory though there may be some motor especially of the third and fifth nerves. Photophobia, scotoma and even loss of vision are seen. Reflex asthma is not uncommon and is markedly aggravated in the acute exacerbations. Disturbances of the sense of smell are quite varied ranging from slight reduction to complete loss with or without cacostmia. Eustachian function is often impaired.

The diagnosis of chronic hyperplastic ethmoiditis and sphenoiditis comprises all the procedures previously described plus.

The mucous membrane usually is less red in this process and feels thick and more firm under the probe. The discharge when scant is yellowish or greenish yellow. Areas of polypoid degeneration and polypi may be abundantly in view or practically none to be seen on the surface but long standing cases are seldom free from them though they may be found only within the cells. "If there are no signs of pus and polypi are present the diagnosis is certain."

In the sphenoidal and posterior ethmoidal regions sunlight or the arc lamp mentioned is essential in searching the tissues and detecting the peculiar colored scanty discharge.

Mucocele is of slow growth and uncomplicated may reach large size before pressure upon and displacement of tissues and nerves produces much pain. It is usually unilateral and the displacements most frequently inward obstructing and occluding the nasal passage. It is afebrile except when it becomes infected and then may become rapidly painful and assume the role of an acute empyema. It is not always entirely enclosed some seepage or overflow taking place and thus is explained some apparent rapid formations when from some cause the overplus is suddenly retained. The extension may destroy turbinates or forcing way through the orbital wall form varying size tumors displacing the contents.

The tumor mass being located by the methods given for the other processes the diagnosis is completed by puncture showing a viscid mucoid content.

Any of these closed processes may be found in a turbinal or other misplaced ethmoid cell.

LIVER PATHOLOGY AND PHYSIOLOGY  
AND ITS RELATION TO DISEASES  
OF THE GALL BLADDER

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Dr. John S. Bobbs, of this city, to whose memory a beautiful bronze tablet has been erected in the public library, probably little dreamed that his pioneer venture into the surgery of the gall bladder would, within a generation, develop into the universally practiced surgical procedure of today. Since this time there has been a gradually ascending curve of surgical indications for the treatment of gall bladder disease, until at the present time it would seem that the peak must have been reached.

Originally only the grosser lesions such as empyema, hydrops and cholelithiasis were regarded as properly treated by surgical intervention. Drainage was the method of choice. Later the non-calculous gall bladder was regarded as a menace to health, minor lesions have been viewed with suspicion and drainage has been discontinued for the more radical procedure of removal of the gall bladder.

The extension of the field of surgery from the grosser lesions of the gall bladder, such as hydrops, empyema and stones to the non-calculous gall bladder, has tremendously increased the difficulties of diagnosis and opened a subject of debatable therapeutics that is far from settled at this time.

Within the last four or five years there has developed an increasing interest in the physiological study of liver function, and the pathological changes in liver structure, associated with gall bladder disease that I believe is destined to have a profound influence upon the surgery of the gall bladder; especially the non-calculous gall bladder. Surgical therapy no less than drug therapy must be based upon sound physiological and pathological ground or otherwise it becomes empirical. With a better knowledge of liver function and pathology, the limits of gall bladder surgery will become clearer and the indications for treatment more rational.

I wish to review some of the more recent investigations into liver function and pathology and point out their bearing on the diagnosis and treatment of gall bladder disease. This relationship between the pathology of the liver and gall bladder is all the more necessary to emphasize because of the tendency of surgeons to concentrate their attention on diseases of the gall bladder without proper regard to the usually associated liver pathology.

The function of the liver is a subject about which there has always been and is yet a great deal of uncertainty. Experimental physiologists, due to the peculiarities of the biliary circulation, have found it extremely difficult to approach the

study of liver function by the usual method of extirpation of an organ and recording the effects produced.

The fact that the venous circulation from the abdominal viscera, passes through the liver by way of the portal vein, and also the intimate relation of the liver with the vena cava, has made extirpation of this organ, without destruction of the abdominal viscera and lower extremities, a difficult procedure. These difficulties, however, were overcome by Mann by a series of ingenious operations, followed by total extirpation of the liver and a study of the effect upon the dehepatized animal.

Perhaps the most convincing conclusion to be drawn from these experiments was the definite relationship between the liver and carbohydrate metabolism. The liver appears to maintain a normal blood sugar level, and if the amount descends below a certain critical level the animal cannot live. The blood sugar in dehepatized animals almost disappeared and the dog would become comatose, whereupon glucose was given and the dog quickly returned to normal.

This observation, and others of similar nature, points the way to treatment of certain grave post operative complications following operations on the gall bladder. The trauma incident to a cholecystectomy in the presence of an infected liver, occasionally results in a grave clinical picture best explained on the basis of suppressed liver function. Under such circumstances the blood sugar fails to be maintained above a critical level, and unless intravenous solutions of glucose be given, death may ensue.

#### FORMATION OF BILE

The belief has been general until quite recent years, that the liver, as far as bile is concerned, acts as a secretory organ, the bile pigment being secreted by the hepatic cells from the blood coursing through its veins and arteries. While this view was not in accord with those of Virchow, who observed substances resembling bilirubin at the sight of old sub-cutaneous hemorrhages, an observation familiar to every one, it was, nevertheless, the accepted belief until recent years.

Whipple and Hooper demonstrated the presence of bile pigment in animals after the hepatic circulation has been greatly diminished by anastomosing the portal vein to the vena cava to form an Eck fistula. Mann further demonstrated the formation of bile pigment in the blood of dogs in which the liver had been entirely removed and noted the development of a definite icterus.

The source of bile pigment or bilirubin is now generally conceded to be hemoglobin set free during the normal destruction of blood within the body, the polygonal hepatic cells excreting the bile in much the same way that the kidney excretes urea.

Based on this theory of the formation of bile



pigment, jaundice may be produced by a pathological alteration either in the formation or excretion of bile pigment. If there be actual blocking of the bile ducts such as occurs in common duct stones, the normal excretion of bile by the hepatic cells will be interfered with, and bile will be reabsorbed by the biliary lymphatics and find its way into the blood stream by way of the thoracic duct and produce an obstructive jaundice.

If there be an abnormally large amount of bilirubin formed in the blood such as occurs in acute destructive blood stream infections, a larger amount of bile pigment is formed than can be passed through the hepatic cells, and will accumulate in the blood stream causing the so-called hemolytic jaundice. If there has been actual damage to liver structure, such as occurs in liver abscess or drug necrosis of liver cells, the bile pigment fails to be removed from the blood stream in sufficient quantities to prevent the development of jaundice, thus producing the so-called toxic or infectious jaundice.

These three clinical types of jaundice, the obstructive, hemolytic and toxic, are based upon the now commonly accepted theory of the extra hepatic origin of bile pigment, an understanding of which greatly aids in a proper diagnosis of the pathological factors which produce the jaundice.

The only one of these types of jaundice which calls for surgical therapy is the obstructive type, usually caused by stones in the common duct or strictures of the common duct, but occasionally by cancer or other lesion of the head of the pancreas.

Until quite recently we were dependent entirely upon the development of icterus for a diagnosis of obstructive lesions of the common duct. Until sufficient quantity of bile pigment had accumulated in the blood stream to result in deposits in the sclera and skin, we had no way of determining the presence of lesions interfering with the normal excretion of bile by the liver.

As a result of increased knowledge of liver metabolism, we have learned to transfer our observations of the development of icterus, to a study of the accumulation of bile pigment in the blood stream.

This has enabled us to discover the presence of pathological conditions involving the formation and excretion of bile considerably before the development of icterus, and, indeed, in many cases where icterus does not develop at all. In such cases as the hepatic congestion of early myocardial failure, differential diagnosis of anemia due to rapid destruction of blood, the diagnosis of typical gall-stone colic, none of which produces visible icterus, yet show an increased bilirubin. It is also probable that such conditions as ruptured tubal pregnancy resulting in the development of large encysted hematocele would show an increase in the blood bile pigment due to the large destruction of

blood cells, thereby aiding in differentiating this condition from pelvic abscesses.

The study of bile pigment in the blood has been made possible by the use of the Van den Bergh test. By the use of this test, both the qualitative and quantitative estimation of bile pigment in the blood can be made. This is of great clinical value both in the diagnosis as above noted of mild grades of jaundice, and as an aid in selecting a proper time for operations in patients suffering from obstructive lesions of the common duct.

Patients with obstructive jaundice have always presented grave surgical risks due to the dangers of post operative hemorrhage. The clotting time in jaundiced patients is markedly delayed; the reasons for which are not known. Post mortem examinations, following operations in jaundiced patients for common duct stones, have shown large quantities of blood in the peritoneal cavity which appeared to have come from no particular vessel.

The length of time a patient has been jaundiced does not appear to be the controlling factor in the amount of bile pigment in the blood and the prolongation of the clotting time. The controlling factor in prolonging the clotting time appears to be the degree of jaundice and the amount of bilirubin in the blood.

This means that a patient may have been jaundiced a very long time, yet the amount of bile pigment in the blood is not sufficient to markedly prolong the clotting time, while on the other hand a patient with a high degree of jaundice and large quantities of bile pigment in the blood present only a few days, will give a greatly prolonged clotting time and prove an unsafe risk from danger of hemorrhage.

This situation was shown clinically in two cases coming under my observation recently. The first case was that of a young woman giving a history of repeated attacks of gall stone colic accompanied by mild grades of jaundice from which she would completely recover. She entered the hospital having been acutely ill, with chills and fever, pain and a high degree of jaundice for one week. Her icterus was of such profound degree that she was green. Blood serum showed large amounts of bilirubin. She had hemorrhages from the mucous membrane of the mouth and bowels, and died three days later without operation because of the danger of hemorrhage.

The other case was a woman past middle age who gave the usual history of gall stone colic endured for many years. One year previous to her entry to the hospital she had an unusually severe attack, became deeply jaundiced and had remained so until her admission. Her skin was of a leathery, dark, tobacco brown color, and she stated that she had frequently been mistaken for a negro. Her clotting time was only a few minutes above normal, but for safety she was given 5 cc. of a ten

per cent solution of calcium chloride intravenously on three successive days, as advocated by Walthers. She also received five per cent glucose intravenously on the day preceding the operation. A small contracted gall bladder with several stones was removed, and two stones in the common duct. There was no post operative hemorrhage or other untoward symptoms which might have been expected if one did not remember that the degree of icterus and not the duration determined the risk for post operative hemorrhage.

#### LIVER PATHOLOGY

The theory of focal infections as an explanation of the widespread distribution of infective processes, has been fully demonstrated both experimentally and clinically. The blood stream is the vehicle, and along its current is carried the organisms which later lodge in some distant organ, there to begin a new disease process in an hitherto healthy organ.

This conception of the sequence of certain pathological processes was a brilliant contribution to our knowledge of the etiology and treatment of certain diseases, such as cardiac and joint infections. In this group of diseases produced by focal infections, the gall bladder has been placed by certain able and enthusiastic investigators, notably Rosenow. The question of whether the gall bladder viewed as an independent organ, becomes infected without relation to the liver, is a fundamental one, both in a discussion of the etiology and treatment of gall bladder infections.

Does the gall bladder first become infected, later spreading to the liver, or is the process reversed; the primary infection occurring in the liver and later spreading to the gall bladder?

It is, of course, easy to see that if the primary lesion is in the gall bladder, a radical view toward removal of the gall bladder would be justified. On the other hand, if the primary lesion is to be found in a hepatitis which later involved the gall bladder, its removal, except when containing stones and crippled by fibrosis and adhesions, would be viewed with less enthusiasm.

To Graham of Washington University belongs the credit for first calling attention in 1918 to the almost universal association of hepatitis with cholecystitis. This fact has been verified by many investigators since. The liver pathology varies from the gross lesions found in long standing cases of common duct obstruction, where the liver is dark brown, almost black in color, with thick, blunt edges, a true cirrhosis to the minor grades of hepatitis found in association with non-calculous but infected gall bladders.

In Graham's original paper printed in 1918, after presenting his evidence that hepatitis is a constant accompaniment of cholecystitis he makes the very natural enquiry—"Is the cholecystitis

primary or secondary to hepatitis, or are the two conditions concomitant in origin."

Four years later, after experimental work and clinical observation, he answers the question with the statement that gall bladder infections are, in the majority of cases, lymphatic infections carried over from a previously infected liver; the liver infection occurring by way of the portal circulation, from which origin the gall bladder is infected by way of the lymphatics.

This conception of the sequence of events in the development of gall bladder disease is now pretty generally accepted and forms a much more rational basis for therapy, either surgical or medical, than the embolic theory emphasized by Rosenow.

What are the obvious conclusions to be drawn from this conception of the etiology of gall bladder infections:

First. That local infections anywhere along the alimentary canal from the stomach to the rectum may result in hepatitis carried to the liver by the portal circulation and eventually involving the gall bladder. Infected hemorrhoids, chronic appendicitis, typhoid fever, gastric and duodenal ulcers may all result in portal infections.

Second. Infected gall bladders mean infected livers, both adding their share to the symptoms presented by the patient.

Third. That the removal of an infected gall bladder does not and cannot relieve the patient of such symptoms as may arise from an infected liver, until such time as the liver may recover after relief from the incubus of an infected gall bladder.

At the present time a great many gall bladders come to operation, at which time it is exceedingly difficult to determine whether or not this organ is responsible for the symptoms of which the patient complains. If the clinical history has been characterized by frequent attacks of colicky pain, with or without jaundice, frequently referred to back in region of right shoulder blade, and accompanied by definite gastric disturbance, such as vomiting, flatulence and distress after eating certain foods, notably carbohydrates, the gross pathology of the gall bladder will usually leave no doubt as to the advisability of its removal. Stones may or may not be found, but usually are.

On the other hand, if the symptoms are milder, and consist of mild grades of gastric disturbance, with no history of definite colicky attacks, and yet point definitely to the biliary system as the seat of trouble, one is likely to have great difficulty in determining on the proper procedure.

I believe that in this mild group of cases, which at operation show only a minimum of gross evidence of disease, a great many gall bladders are being removed that had better be left alone. It may be conceded that from the standpoint of the pathologist the gall bladder wall is infected in this group. It is probably true that the majority



of individuals over thirty years of age will, upon examination of their gall bladder, show definite microscopic evidence of disease.

Mentzer, in a series of six hundred twelve consecutive autopsies performed at the Mayo clinic, found definite evidence of gall bladder disease from the standpoint of the pathologist, in seventy-five and six-tenths per cent of the series. It is evident, therefore, that reliance cannot be placed upon the microscopic interpretation of disease of the gall bladder as a safe guide, either in the diagnosis or treatment of gall bladder disease.

The parallel between the mildly diseased, chronic gall bladder and the chronic appendix is very striking. How frequently the appendix has been removed for lower right sided symptoms, with the reassuring report from the laboratory, of chronic appendicitis, is a familiar story to everyone. But many of these patients are not relieved from their right sinitis by removal of the appendix.

It is, I think, possible that the same mistaken attitude may be made relative to the mildly infected chronic gall bladder that has been made in the case of the appendix. In a recent report of nine hundred three cases of gall bladder operations in Deaver's clinic, there were four hundred fifty-two calculous and four hundred thirty-eight non-calculous gall bladders, an almost equal number of calculous and non-calculous cases. This would seem to indicate a very radical attitude toward the surgery of the non-calculous gall bladder.

Hope has been entertained that the method of cholecystography, proposed by Graham, would aid in the milder grades of cholecyctic disease. He reports ninety-seven per cent correct diagnosis, verified by operation in all types of gall bladder disease. He does not, however, differentiate between the clinical gall bladder presenting definite symptoms, relieved by operation, and the pathologic gall bladder, as determined by the pathologist. Obviously, it is the latter that forms the criterion for a basis of his figures.

The high per cent of correct diagnosis reported by Graham and others, by the use of the dye, very materially lose their significance as an aid to surgical treatment, in the light of the findings of Mentzer quoted above, wherein he found seventy-five per cent diseased gall bladders in six hundred twelve consecutive autopsies.

It seems to me obvious that however valuable the dye method of visualizing the diseased gall bladder may be, it has its distinct limitations in exactly the group of cases in which the greatest difficulty of diagnosis lies.

There is accumulating evidence gained from a follow-up study of the milder grades of cholecyctic disease without stones, treated surgically, which tend to discredit surgical treatment in certain cases. In a study of post operative end re-

sults of a series of two hundred eighty-two gall bladder operations, E. M. Stanton draws the following conclusions:

"1. All actual objective data that I have studied points to the conclusion that in the present state of our knowledge the one reliable indication of gall bladder disease of a type yielding to surgical intervention is the presence of well defined attacks of gall bladder colic. If the surgeon is definitely certain of his ground relative to the clinical history of biliary colic, he can proceed to remove the gall bladder irrespective of demonstrable gall bladder disease.

"2. Just so far as the clinical picture of true biliary colic becomes doubtful, or the clinical picture fades over into ill defined digestive disturbances of the general type that many surgeons have been wont to call the symptoms of the precalculous stage of cholecystitis, do the end results of operative treatment begin to fail.

"3. As in chronic appendicitis, it seems highly probable that the indications for operation must be based and justified almost wholly on the symptomatology, and that little or no reliance can be placed on the pathologist's report until such time as pathologists learn to recognize a pathologic condition corresponding to the symptomatology."

While philosophy has little to do with the practice of medicine, there is a well known maxim, the teaching of which might well be incorporated into medical thought. When the conclusions drawn from pure reason and logic conflict with the conclusions of experience, the latter will usually be found to be correct and are the safest to follow. Increasing experience in the removal of the mildly infected gall bladder with vague and indefinite symptoms of biliary tract disease, is a better guide to proper treatment than the teachings of pure science in the person of the microscopist.

#### POISONING FROM SHOE DYE—REPORT OF CASE

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My recent experience with a case of poisoning from shoe dye has prompted me to review the literature on the subject. We find Muehlberger (*Journal A. M. A.*, June, 1925), reviewing the literature of forty-seven reported cases and adding ten cases. Later we find Patek (*Journal A. M. A.*, March, 1926), reporting three cases. Townsend (*Wis. M. J.*, September, 1926), and Ray (*W. Va. M. J.*, October, 1926), each support a case, bringing the total number of cases in the literature up to sixty-two.

This type of poisoning is much more prevalent than the number of reported cases would indicate. Several shoe repairmen whom I questioned could recall patrons who were poisoned through wearing recently dyed shoes. The Department of Health of Chicago (June, 1926), recognized the danger

and required that "cautions" be posted wherever shoes were dyed, and after March 1, 1927, prohibited the use or sale of leather dyes containing toxic solvents. Muehlberger cites a fatal case reported by Stone (*Journal A. M. A.*, October, 1904), and reports a fatality among his group of cases. The case at hand did not prove fatal, but it serves to bring the almost classical picture of this condition before us.

Patient, L. T., age nineteen, robust, active young man, employed as shoe repairman for the past three years. On June 3, 1927, shortly after dinner, his attention was called to the peculiar color of his face. At this time he suffered no discomfort. Later in the afternoon he felt weak and dizzy. Still later he became nauseated, vomited a little and developed a slight frontal headache. Although he felt weak he continued at work and went home as usual for his supper. At home the peculiar color again was noted and it was thought that he had been poisoned. He was taken at once to a physician who sent him to a hospital and ordered digitalis. At 8:45 p. m. I was called to the hospital and found a patient very deeply cyanosed over his entire cutaneous and mucous surfaces. He complained of no distress except a dull frontal headache, but he was extremely apprehensive. He gave no history of dietary indiscretion or of having partaken of any

beverage or medicine. He continued to vomit at times. Upon sitting up in bed the cyanosis was deepened to nearly black. His temperature was 97.4, pulse 96, respiration 24. Urinalysis disclosed no reducing substance. Blood examination revealed a deep color to the fresh blood, some crenation and destruction of red blood cells, hemoglobin sixty per cent. The white count showed fifty-eight per cent polymorphonuclear, thirty-four per cent small lymphocytes and eight per cent large lymphocytes. Upon close questioning it was brought out that on the previous day he had dyed two pairs of shoes for himself, and wore one pair for a while the same evening. Next morning he put on the same pair of dyed shoes and wore them to work. Not until after dinner was his attention called to the peculiar color of his face.

The treatment consisted of external heat, strychnine by hypodermic, elimination and rest in bed. Within five or six hours there was a marked improvement in the cyanosis and the pulse, temperature and respirations were more nearly normal. By the following morning the cyanosis had nearly cleared up and on the second day the patient was sent home. He was still languid and had a deeper color than normal.

We have made no analysis of the dye used and are unable to say whether it should be placed with the aniline or the nitro benzene cases.

#### PUBLIC HEALTH OBSTRUCTIONISTS

The *Chicago Tribune* has well asked, "What is the matter with Indiana?" when it points to the state dictation by Reverend Shumaker, and the rotten political conditions brought about through the now discredited work of the Ku Klux Klan. With equal propriety it might be asked what is to become of Indiana people in connection with all efforts to promote and conserve health when we consider the influence and the effects of such obstructionists to health conservation as the Christian Scientists, the members of the League for Medical Freedom and the Anti-Vaccination Society. Smallpox, more prevalent in Indiana than any other state in the union, is on the increase in Indiana, and the existence and the spread of the disease can be attributed directly to the lack of vaccination brought about through the damnable influence and teaching of the obstructionists already mentioned. In spite of the fact that there are several hundred cases of smallpox in the city of Indianapolis, a court, probably under the influence of the members of the League for Medical Freedom, adherents to Christian Science Faith, or members of the Anti-Vaccination Society, has issued an injunction which forbids the Indianapolis Board of Health from enforcing an order requiring vaccination against smallpox for attendance in school. Perhaps it would be just as well to have a showdown on the question, and to that end we hope that the health board of Indianapolis will make no move to dissolve the

injunction that has been secured. Neither do we see any sense in closing the public schools if smallpox spreads, for there is nothing that will teach a child to recognize and dread fire any quicker than to burn the fingers, and if the good people of Indianapolis, child-like, burn their fingers on this smallpox question perhaps they will come to their senses and be willing to support health officers in their efforts to wipe out a most detestable scourge. Smallpox is an entirely preventable disease, and the only reason that there are several hundred cases of smallpox in Indianapolis, and many other cases in various other portions of Indiana, is because of the insane opposition to vaccination by a few obstructionists to medical progress.

First Cannibal—"The chief has hay fever."

Second Cannibal—"Serves him right; we warned him not to eat the grass widow."

—Exchange

Tourist—"To what do you attribute your great age?"

Oldest Inhabitant—"I can't say yet, sir. There be several o' them patent medicine companies bargainin' with me."

—Answers

Mistress—"You say you understand all about babies. What experience have you had?"

Applicant for Job as Nurse—"Why, I was a baby once myself, ma'am."



## THE JOURNAL of the

### Indiana State Medical Association

Devoted to the Interests of the Medical Profession of Indiana

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## EDITORIALS

### SURGICAL MORTALITY AND MORBIDITY DUE TO DELAY\*

Procrastination is said to be the "thief of time."

The truth of this adage is nowhere more vividly and tragically illustrated than in surgery. Millions of men are untimely launched into eternity and other millions spend unnecessary time in unproductive and more or less distressful invalidism every year as a result of delay in the institution of proper surgical treatment. Put in another way, millions of years of time are lost annually to say nothing of the suffering entailed by delay in surgical intervention.

This delay is due to one of three causes: 1. Lack of communication with places where aid can be had. 2. Delay on account of the patient or friends or both. 3. Delay due to doctors.

Obviously it is needless to discuss the first cause of delay. The profession may not justly be held for the delay due to the patient or his friends in most cases, and yet I feel that we cannot escape entirely this responsibility. Too often we minimize the harm done by delay for the purpose of protecting the physician or to prevent the remorse that would come to patient's family or friends with a knowledge of the truth.

A patient is brought to the surgeon with a diffuse peritonitis due to appendicitis and a relative asks the surgeon if it would have been better had the patient been operated earlier? Or a patient with a gangrenous gut consequent upon strangulation in a hernia is operated and the same question is asked of the surgeon. How often the surgeon's reply is evasive or downright false! However great our desire to excuse these evasive or false answers for reasons suggested above, we cannot escape the fact that in proportion to the number of these answer will be the number of unnecessary deaths and prolonged illnesses resulting from these conditions.

To be brutally frank under circumstances like these will perhaps lose the surgeon some friends and perhaps now and again a patient but it will save lives and suffering, be conducive to peaceful sleep and a satisfied conscience and in the long run will win patients. However, delay in seeking surgical aid is more often due to the fear entertained by people generally of operations—a fear founded on lack of understanding.

The delay which may be laid to the door of the doctors is due to several causes—many doctors hesitate to recommend an operation for fear of alarming the patient and his friends and some, I regret to say, for fear the patient will seek other advice. Also, and again I regret to say it, some doctors are rather proud of their reputation of being "opposed to operations." These excuses are only mentioned to be condemned. Not a few surgeons hesitate in making an exploratory operation feeling that such an operation indicates a lack of diagnostic acumen when the truth is that operation is frequently the best and safest and oftentimes the only means of making a diagnosis.

Delay in surgical treatment is not infrequently due to faulty teaching both in text books and in colleges. This faulty teaching pertains both to diagnosis and treatment. Efforts at exact diagnosis in many abdominal troubles is not only frequently futile in that in the end an operation is often required anyway and in many cases an exact diagnosis is of no practical value to the patient while the time spent in trying to make one may and not infrequently does, cost the patient his life while often the only benefit derived from an exact diagnosis is that questionable one which comes to the doctor through addition to his pride.

Instead of stressing the finer points in diagnosis, which after all frequently mislead one, both teachers and text books should emphasize the fact that in many cases an exact diagnosis is of no importance, and in many others impossible; that time is an element of paramount importance and that the way to save time is to operate.

Ice bags and taxis, advocated by some, in the treatment of strangulated hernia, is little short of criminal, and cathartics, ice bags and hot fomentations in appendicitis and bowel obstruction are in the same class.

Cancer costs the United States 110,000 lives annually. It is estimated that if such prompt treatment and recognition of this condition as the present state of our knowledge permits were generally instituted the death rate could be diminished one-third—a saving of over 35,000 lives a year.

The death rate from bowel obstruction has remained at about forty per cent for years. Three-fourths of this mortality is the mortality of delay, and may I add in parenthesis, that no small part of the remaining mortality is due to the giving of cathartics.

In obstruction from strangulated hernia the mortality is twenty-five per cent, a large part of which is due to delay in operating and the balance either to taxis or cathartics or both.

A large part of the morbidity and mortality from diseases of the thyroid gland would be wiped out if all permanent goiters were regarded as potentially harmful and were removed while innocent. A satisfactory recovery from toxic goiter

\*Read at Detroit, June 16, 1927, Clinic Week, Detroit Medical College.

is not to be expected if removal is unduly postponed.

The mortality from appendicitis remains much too high and the morbidity much too great, both due in a large measure to surgical delay. It would be hard to estimate the disability and heartache due to delay in instituting proper surgical procedures in deformities, congenital and acquired. One who has noted the change in facial expression that comes to a boy or girl of twelve or fifteen years after the correction, say of his or her clubbed feet, is much more capable of estimating the psychic effect of these deformities than one who has not made this observation. Many of these deformities can be prevented and many already acquired can be cured by proper surgery and whether function is secured or not the relief of the deformity itself is well worth while.

How many livers and kidneys are irremediably damaged by neglected gall-bladder disease it would be, perhaps, impossible to determine and equally impossible to compute the time lost and the suffering endured by these patients before they resorted to surgery, meanwhile laboring under the delusion that their trouble was due to disease of the stomach. It might be well to say just here that the majority of "stomach" complaints are not due to diseased stomachs.

A large percentage of the deformity, disability, and suffering due to osteomyelitis could be prevented by prompt and proper surgical interference. Many more illustrations might be given of the dire results of delay in surgery but I have touched a sufficient number of the high spots to prove that delay in operating is the cause of a large part of our present day mortality and morbidity in surgical diseases, and have shown that the blame for this delay lies largely upon the patients themselves and is due to lack of understanding. Now it remains briefly to suggest the best way to improve the situation.

It is easier to get one point across to an audience than two or more, and besides if one understands the underlying principles of a thing the details are easy to master. Therefore the best plan would be rather to hasten the spread of the gospel of periodic health examinations than to stress the value of promptness in the treatment of individual maladies, not neglecting, of course, the specific teaching on all of the many occasions when such specific teaching is especially appropriate.

This is the time of slogans. I suggest the following for all doctors: "Persistently push the propaganda for the promulgation of periodic health examination."

M. F. PORTER.

#### INTELLIGENT USE OF OPHTHALMOSCOPE

We always have maintained that an ophthalmoscope gets a general practitioner into more trouble than it gets him out of. In fact some

otherwise well-trained internists and neurologists are unable to interpret what they see with the ophthalmoscope. We also are forced to admit that there are some oculists who likewise use the ophthalmoscope badly for lack of adequate training and experience. The ophthalmoscope is a wonderful instrument of diagnostic importance, but its intelligent use requires a great deal of training and experience in order to interpret the findings correctly. As an evidence of an inexcusable error on the part of a self-styled oculist who for years has limited his practice to diseases of the eye, we know of an instance where medullated nerve fibers were diagnosed as a serious involvement of the optic nerve and the patient treated for the supposed trouble over a period of a year and a half. In another instance a general practitioner who brags about being "an all-around specialist," and who pretends to use the ophthalmoscope, told an oculist called in consultation that the patient had "a choked disc right up to the pupil," when in reality the patient was suffering from an opacity of the posterior layers of the lens. It would be a good thing if many of these "all-around specialists" got a few bumps that would teach them to know their limitations.

#### JUGGLING STATE FUNDS

It seems to be a joyous pastime of our state officials to juggle the funds raised by taxation, though back of it all is the leniency on the part of the legislature in passing laws that permit this sort of maladministration. The gasoline tax originally was intended to go into a fund to make and maintain roads, but not all of the money raised from the gasoline tax is spent that way, though heaven knows that we need more and better roads. At the present time our burden of complaint is that the taxes raised from those who desire to practice medicine in the state of Indiana are not given in whole to the Board of Medical Registration for its expenses and to aid in the prosecution of offenders. In other words, a part of the money that is taxed medical men for the privilege of practicing medicine in Indiana is diverted to the General Fund and applied to pay the salaries of state offices and for junketing trips or anything else for which it pleases the state officials to spend money. No objection would be raised to this if any provision had been made for enforcing the medical practice act, but whereas the law says that the Board of Medical Registration and Examination shall enforce the medical practice act, no funds are provided with which to pay the expenses of enforcement. Furthermore, the men who serve on the Board do so at a considerable loss of time and money, for the honorarium that goes with the position is scarcely enough to pay for transportation. In fact the man who accepts an appointment on the Board is obliged to have a lot of general welfare spirit in him if he sticks to the job and puts up with the loss of time and expense that goes with the holding of the office.



Just why the Board should be limited in expenditures to an amount far less than what the Board actually collects from candidates for licensure is hard to explain, and as much may be said concerning the feature of the law which requires the Board to enforce the law and yet provides no funds for the purpose. Certainly the whole proposition is one that deserves readjustment, and the only consistent and fair thing that should be done is to permit the Board to use the funds collected from candidates for licensure in enforcing the law, leaving the provisions as to expense of the Board members as they are if there is objection to the payment of a decent salary. Now that we have a new medical law which possesses some teeth, and that can be enforced for the benefit of the people in protecting them from quackery, we think there is an earnest need for means where-with the Board can make the law function to its fullest extent. At present the Board is limited to an expenditure of seven thousand dollars annually, which must cover the salary of the clerk and secretary, the routine expenses of the office, together with the railroad fares, hotel and other traveling expenses of seven members. All of the rest of the funds of the Board are diverted to the general fund and utilized for something else. This is a condition of affairs which should be corrected promptly, for without funds the Board is unable to make any investigations as to merits or demerits of the claims put forth by applicants or to prosecute offenders.

#### ACCESSORY SINUS INFECTION

During the latter part of June Indiana suffered from a few days of very hot weather followed by a cold spell. The sudden change had the effect of producing an epidemic of colds in the head of rather unusual severity. The striking feature of these cases is the fact that most of them occurred in patients who previously had had affections of the accessory sinuses of the nose that were given non-operative treatment. Persons who had operations to secure ventilation and drainage of accessory sinuses for the relief of sinusitis seem to have escaped. This would indicate that a latent or slumbering sinusitis requires only a lowered resisting power and an active cause for the lighting up of a very severe infection. Undoubtedly there are many slumbering sinus infections that have followed in the wake of the more or less severe epidemics of influenza of the past few years, and a clinical history of a large number of these cases seems to indicate that free drainage and ventilation of the sinuses by operative methods has done more to bring about cure than anything else. Experience shows that little faith can be placed in the treatment which relies upon drainage from the natural orifices, even with employment of suction, and especially when the infection is tolerably virulent. The acute symptoms may subside under this treatment, but no such satisfactory cure is ac-

complished as that following surgical ventilation and drainage carried out intelligently.

#### COUNTRY DOCTOR

The country doctor lives a life seldom sensational. One night lately, however, Dr. Albert Patrick of Marceline, Mo., awoke from a deep dream of peace to play a role seldom cast outside the cinema. So, at least, said last week's news from Los Angeles.

What sent Dr. Patrick hurrying out of his house, into his flivver and into the night, was a telegram asking him to meet a train at the railroad station. Not many trains stop at Marceline, Mo., least of all the ponderous flier that groaned to a halt this night, dropping off brakemen with lanterns and a worried conductor.

Dr. Patrick left his flivver running, for the emergency, and hurried forward with his small black grip at the ready.

"I'm Dr. Patrick, did you want me?"

"You bet, hop on," said the conductor.

Hopping, Dr. Patrick followed his leader into a Pullman filled with hushed excitement. He was led to a man violently ill in a drawing-room. As Dr. Patrick bent forward to begin an examination, the long train trembled and jolted. It was moving forward.

"Stop the train," cried Dr. Patrick, alarmed. "I can't leave home."

"Sure you can," said a stout gentleman. "Be calm. Just go ahead and 'tend to Mr. Flinn."

"But my Ford's still running out there by the platform," pleaded Dr. Patrick.

"That's all right. We'll pay for the gas."

"And anyway I haven't a nightshirt with me."

A bald, intense man answered: "If you get Mr. Flinn to the point where you dare go to bed, I'll lend you my pajamas."

Dr. Patrick surrendered his whole attention to the sick man. The train tore westward. The bald, intense man wrote out a telegram to Mrs. Albert Patrick of Marceline, Mo.:

"Dr. Patrick is accompanying us to Los Angeles to care for a patient. He'll be home soon.

(Signed) "CECIL B. DEMILLE."

What Mrs. Patrick said to herself about this telegram, she alone knows. What was the matter with John C. Flinn, head of the Producers & Distributors Corp., is a professional secret. But some of the sights and sensations Dr. Patrick experienced in the next few days are now part of the history of Marceline, Mo.

For Dr. Patrick's abduction was by a whole trainload of cinema folk hurrying to a coast convention. Mr. Flinn's recovery was rapid and happy. And to reward virtue in true cinema style, Mr. DeMille and friends took Dr. Patrick for a thorough inspection of film-land, including even a Mack Sennett bathing beauty scene. And they gave him, together with his ticket back to

Marceline, Mo., a fee whose proportions will not be approached until Marceline, Mo., breaks out with simultaneous epidemics of mumps, colic, babies and pink eye. (*Time*, July 18, 1927.)

### THE RED CROSS

IN time of disaster the Red Cross is a Godsend. In Indiana we have had an example of what the Red Cross can do as evidenced by its activities in connection with the Francisco mine disaster at Princeton last December. When news of the explosion reached Princeton, the Gibson County chapter of the American Red Cross took immediate steps to render necessary emergency relief. The Red Cross nurse, members of the disaster relief committee, and the executive secretary were dispatched to the scene of the explosion. In a short time the Red Cross was rushing hospital and other relief supplies to Princeton to help the Methodist Episcopal Hospital to care for the injured. During the emergency period relief in some form was given to about two hundred men. A canteen service was established at the mine, and food, clothing and other supplies were distributed to the rescue squad engaged in bringing the bodies of the dead from the mine. Within thirty-six hours from the time of the explosion every family affected had been visited, and preliminary surveys had been completed to determine what relief work would be necessary. Later it was found that seventy-two families were affected in greater or lesser degree by the disaster. Thirty-seven men were killed and twenty others were injured. A local advisory committee was appointed to act with the Red Cross officials to determine the wants. In the majority of instances an award has been made in the form of a maintenance trust fund set up to augment the sums accruing to each family under the insurance compensation provision. In many families it was found that the amount received from the compensation insurance was inadequate to meet the needs of the family. Relief was confined strictly to the families who suffered as a direct result of the explosion. The relief fund totalled \$21,127.19, and in addition to this contribution a donation also was made by the National headquarters to cover the cost of supervision, accounting, and other operating expenses. In connection with the work of the Red Cross a word of praise is due to the medical profession of the vicinity for the untiring labor and splendid service rendered by the individual physicians who responded to the call for help.

THE following statement made by Wm. S. Tomlin, chairman of the Arrangements Committee, is of interest to all who will attend the Indianapolis session:

"On Wednesday evening following the dinner of the county secretaries at The Athenaeum there will be an entertainment and smoker in the large hall of the same building. The players of the local society will reproduce, with additions bring-

ing up to date, "The Spring Frolic," strictly limited to the profession. If one has not seen this his eyes and ears certainly should be preserved, for a brighter and more entertaining and corrective presentation of the foibles of our sect has never been produced. Laughter unto tears, with wholesome effects conjoined with genuine spirits of camaraderia will serve to make this occasion one that you will never forget. Refreshments and smokes will be in abundance and there will be the best opportunity to meet and to know better all your confreres with foibles understood and the trappings of greatness, near greatness and supposed greatness laid aside.

"The ladies will have a reception of their own Wednesday evening, a luncheon and party Thursday noon and a big sight-seeing trip on Friday morning during the convention.

"The big feature of the convention will be the banquet and dance Thursday evening, September 29th, at the Claypool hotel."

### EDITORIAL NOTES

#### DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

HAVE you taken your typhoid injection? If not, why not? With equal propriety, we may say, have you been vaccinated against smallpox?

THE Indiana State Medical Association will meet in Indianapolis the last three days of next month, or Wednesday, Thursday and Friday, September 28th, 29th and 30th. Do not permit anything to interfere with your attendance at the convention.

EVERY child should be vaccinated against preventable diseases before entering school. The matter should be brought to the attention of the parents, and this can be done in no better way than by a printed slip or letter sent out by the health authorities.

WE never have heard of a Christian Science nurse, and yet a correspondent of the *Nebraska State Medical Journal* mentions having met one while attending the Washington session of the A. M. A. The correspondent says, "If all is imagination then she must nurse imagination."



THE reports of our standing committees of the Indiana State Medical Association must be published in the next issue of *THE JOURNAL*. This means that copy should be sent in right now. Chairmen of committees should have their reports ready for the printers not later than August twentieth.

PHYSICIANS would not have much use for collection agencies if business methods were adopted in the presentation and collection of accounts for professional services rendered. Of course, physicians will have a lot of poor and dead-beat accounts when they present statements only once in six or twelve months.

AN effort is being put forth to have a meeting at the Indianapolis session of the Indiana State Medical Association, open to the public, with a noted speaker whose subject will be "Cancer." This is a very worth-while project and should receive the endorsement and support of every member of the medical profession of Indiana.

THE Committee on Arrangements for the Indianapolis session of the Indiana State Medical Association suggests that every physician who attends the Indianapolis session may, with perfect propriety, have posted in his office during his absence the following sign: "Doctor \_\_\_\_\_ is out of the city attending the Indiana State Medical Association convention in Indianapolis."

A SOUND mind and a healthy body has been exemplified in the achievements of Lindbergh. That young man should be an example to the youth of the country. Neither his mind nor his body have been spoiled by dissipation. It is true that he owes much to his parents, for inheritance counts for much, but at the same time the young man deserves great credit for the kind of a life he has led.

AKRON, Ohio, has an orchestra the members of which are all physicians. It is the only organization of its kind in the world. We hear of men blowing their own horns, but this is the first instance in which we have heard of a body of physicians in one city taking so generally to blowing their own horns. We hope there is more harmony in the music than there is in the social status of the average medical society.

A RESOLUTION to the effect that physicians are not under any obligation to provide information to insurance or indemnity companies unless paid the usual charge for similar service given to private patients, was approved and adopted by the House of Delegates of the American Medical Association at the Washington session this year. Indiana doctors who have been donating services to the insurance companies should make a note of this action.

THE president of the Ohio State Medical Association, in connection with the discussion of medical economics, said: "Be sure of one thing in your investment; that is, that you will get your principal back. Always be suspicious of an investment that promises more than six per cent yearly return. If you will follow common sense in your investments you will have less headache and more money." That is sound advice, but how many doctors will follow it?

HOLDERS of certificates from the National Board of Medical Examiners are registered without further examination in thirty-five states, the Canal Zone, Porto Rico and Hawaii. Indiana is not in the list, and it does not speak well for us that through technicality our Board of Medical Registration and Examination refuses to recognize the certificate of the National Board. Certainly some means should be adopted to correct this condition of affairs.

REVEREND SHUMAKER accuses the newspapers of many crimes of the calendar because they do not support his prohibition campaign in all its details. He would have newspaper editors and proprietors sent to the good old Methodist hell. Some of the newspaper editors and proprietors who have been accused of dishonesty, misrepresentation, and prevarication, have come back at the Reverend Shumaker by suggesting to him that those who live in glass houses should not throw stones.

POLITICIANS are afraid of an organized vote. This fact seems to have escaped the attention of the medical profession. Whenever physicians as a unit make their votes felt, then and then only will politicians pay some attention to the request of the medical profession, that are always reasonable, concerning legislation. We never will get anywhere by quarreling among ourselves or being divided in opinion. Solidarity in the medical profession is a condition that is needed and should be encouraged.

THERE is an old saying that when thieves fall out honest men will have their dues. A political scandal that is turning Indiana upside down at the present time is what many of us thought would turn up sooner or later as a direct result of the mixing of Republican politics with Ku Klux Klan activities. Crookedness may win out for a while but in the end it fails. We hope that none of the medical men of Indiana, even though they occupy political positions, are mixed up in any of the scandals that are being unearthed.

As a general proposition a cheap price means cheap quality. We are led to make this remark because one of our oculist friends claims to be saving money as a result of prescribing lenses ground by a concern that makes a cheap price but

is not recognized by the better manufacturing opticians as furnishing goods of quality. As a rule you get only what you pay for, and whenever you find some firm that is underbidding everyone else of established reputation it is fair to assume that there is something wrong with the quality.

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### DOCTOR!

Please show this to your wife and insist that she accompany you to the State Medical meeting in September!

The members of the Woman's Auxiliary to the Indianapolis Medical Society are preparing an interesting program of entertainment for the ladies and desire a record attendance.

Moreover, it is planned to effect the organization of a State Auxiliary and a good representation will be encouraging.

**LADIES! Do come along!**

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ONE of the dangerous tendencies of the times is the development of bureaucratic government. If a few laymen working overtime at uplift work under good salaries, most of whom are women, have their way about it, it will not be long until every human act is governed by some bureaucratic regulations from a department at Washington. This paternalism or tendency to regulate the private and daily lives of the citizens of this country will get us into serious difficulties before long. No longer should we criticise communism or the anarchistic and socialistic ideas that are rampant in Russia.

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PLANS are being formulated for increasing the supply of medicinal whisky available in those states where physicians are permitted by law to prescribe alcoholic beverages for the sick. Reverend Shumaker says that whisky guzzlers and whisky doctors are the only ones that want medicinal whisky in Indiana. He ought to know, and undoubtedly he is getting a good fat salary for pretending that he does know. However, there is some indication that the provisions of the Federal law eventually will prevail in Indiana and, if so, a little more medicinal whisky in this state will be useful.

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It would be interesting to know who is financing the Anti-Third Term League. It looks as though somebody covets the place occupied by Coolidge and is willing to go to almost any lengths to get it. We are not so strong for Coolidge but we think this third term bugaboo is about the silliest thing that has been heard of for a long time, although almost anything can be expected now days, and especially at the hands of those who want to get into office. Probably the next thing we will hear is an effort to throw Coolidge out of office at once because he used worms in fishing for trout.

OPINIONS differ as to when sex education should begin with children. We see no occasion for extended argument, for a child ought to be given sex information as soon as he indicates an interest in such matters. This interest occurs at varying ages, under varying conditions, all of which must be taken into consideration. A consensus of opinion is that most children show interest in sex matters before six years of age or before going into the schools, and under any circumstances they should know something about sex and reproduction before they enter school. This information is best given by the parents.

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TWENTY-SIX thousand Kahn tests compared with the Wassermann test are reported by Howe of the Illinois Department of Public Health in *The Journal of the A. M. A.* of June 11, 1927. The interesting feature of the report is that there is relative agreement in 97.8 of the tests, and in the small percentage in which there is a disagreement, the Kahn test proved to be more sensitive. The advantages of the Kahn test are the saving of labor, time and cost. In the definite character of Kahn reactions in specimens in which the Wassermann is anti-complimentary, in comparative simplicity, and in reduction of technical errors.

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THANK kind fate the wrangling and jangling in our State Board of Health seems to be at an end. Dr. King, the secretary, has been reappointed for another four years, and the appointment was justified. It is now up to the Board to act harmoniously in promoting public health matters, and above everything else to steer clear of anything that savors of the private practice of medicine. On the other hand, the medical profession of the state should support the Board in all of its legitimate work to help improve health conditions in the state. We must have teamwork and plenty of it, and no stepping on each other's toes!

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CONCERNING the matter of the education of the public in medicine, the *Journal of the A. M. A.*, June 11, 1927, says that the House of Delegates at the Washington session concluded that interviews or articles of an educational nature on medical or health subjects intended for the lay press or lay audiences, should give expression to the consensus of opinion of the medical profession rather than to personal views which may be in conflict with generally accepted views, and that articles should appear preferably under the auspices of the American Medical Association or one of its component societies or constituent associations. Amen!

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If anyone thinks that homeopathy is dead he ought to see the plans for the new Hahnemann Medical College and Hospital in Philadelphia which is to occupy a half block, be sixteen stories high, and contain 334 rooms. There will be 176



one-bed private rooms, twenty-eight two-bed semi-private rooms, forty-eight four-bed semi-private rooms, and many rooms containing from two to ten beds. There will be eleven operating rooms, twenty-one solarium rooms, one play room for children, and one large sun porch. The building will contain a clinical laboratory and the scientific departments of the college. Its construction already has been started.

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A PRACTICAL knowledge of French is a good thing for those doctors who are going abroad to study. Next to English, French is almost the universal language, for no matter what country you visit you nearly always will find that many of those with whom you come in contact can speak French in addition to their own language. It is quite true that English is very generally spoken in all foreign countries by those who come in contact with travelers, but at the same time if English is *not* spoken it is a rather safe bet that French is understood, so that a knowledge of English and French will help one out in most any part of the world.

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ACCORDING to a decision of the Internal Revenue Department persons qualified as osteopaths only under the laws of the State of Michigan are refused registration as practitioners under the Harrison narcotic law. The decision is eminently fair and just. Unfortunately we seem to have no such consistency exhibited in Indiana where almost any one belonging to the drugless healing cults can procure a permit to administer or prescribe narcotics. It is a fine commentary upon our ideas of consistency when we permit the osteopaths, who acknowledge that they have not been trained in the use of drugs, to administer or prescribe narcotics.

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OCCASIONALLY some one writes in complaining because he has not received the last two or three numbers of THE JOURNAL that should have reached him. Upon investigation we find that he has moved without leaving any forwarding address with the postoffice or without notifying us as to change of address. If you change your address, even from one part of the city to another, advise us at once so that we can make the change on our mailing list. If for any reason you do not receive THE JOURNAL regularly, write us so that we can check up and find out where the fault lies. Duplicate copies will be sent to you whenever you are entitled to them.

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WE have had several reports concerning crooked dealings on the part of men representing themselves as agents of various physicians' supply houses or manufacturers of physical therapy apparatus, when as a matter of fact they have no connections of that kind. One of the schemes employed is to get a part payment on an order for apparatus, and another scheme is to take in ap-

paratus on exchange. In either case the agent is not heard of again. Perhaps eventually physicians will learn that it is not safe to pay money to agents nor to turn anything over to agents for credit. Send your checks and your merchandise for credit direct to the manufacturers or the supply house through which ultimately the deal must be consummated.

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WE sometimes wonder if the members of the Indiana State Medical Association appreciate our efforts to carry nothing but clean and trustworthy advertising in THE JOURNAL. We not only refuse to accept some advertising that is offered us without solicitation, but we turn down some copy that is furnished by regular advertisers but which is so exaggerated or misleading as to make it unworthy of appearance in a medical journal that attempts to maintain a high standard. This policy not only should be appreciated by the membership, but the advertisers in THE JOURNAL are deserving of the patronage of the readers because they have been approved and are entitled to recognition over the concerns that do not follow a high standard.

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WHENEVER the quacks or medical pretenders are prosecuted the cry is put up that the regular medical profession is back of it, and that it is not prosecution but persecution. Fortunately the fine work of the *Indianapolis News* in discovering and putting out of commission a diploma mill that was running in Indianapolis will have to be credited largely to lay activity and not to the work of the medical profession. The public is beginning to awaken to the fact that health protection must not depend entirely upon the efforts of medical men, but in the interests of such enterprises as the *Indianapolis News* which deserves an immense amount of praise for what was done in closing and putting out of business the diploma mill that existed within our state.

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A SUCCESSFUL promoter confidentially tells us that physicians are the easiest class of people to secure as endorsers or purchasers of most anything that is offered them by a glib salesman or promoter. When this information comes from one who profits by exploiting the physician it is time to take notice and mend our ways. The aforesaid promoter says that doctors should not be stampeded into signing contracts or buying anything without due consideration, and whenever a promoter or salesman says that you must accept the offer at once or it will not be good later it is wise to turn down the proposition instantly. The sensible physician is the one who fights shy of propositions that require his signature and will not wait upon investigation.

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THREE years ago the city of Auburn, New York, with a population of 76,000, began an intensive campaign to rid the city of diphtheria.

A large proportion of the children were Schick tested, and those showing a positive test were given toxin antitoxin. Three years without a death from diphtheria is the enviable record secured from this campaign. This result sustains the conclusions of health officers to the effect that children should receive the advantage of protection against diphtheria by the production of an active immunity with toxin antitoxin. If any community has failed to show a reduction in the morbidity of diphtheria, after engaging in a campaign for the eradication of the disease, it is only because the campaign has not been carried out properly.

A MOVEMENT is on foot to induce all of the newspapers to use type that is easily readable and without strain of the eyesight on the part of the reader. The *New York World* has a new style of type, selected as a direct result of the advice of eyesight specialists and for the distinct purpose of making that newspaper easy to read. Not only will larger and better type save the reader's eyes but the newspapers using the better grade of type profit through the increased reading that is brought about by making the readers more comfortable. It would not be a bad idea for the medical profession in all communities to take an interest in this matter by an attempt to have all newspapers made easier to read through the adoption of better type, for there is no question of doubt that the small type used in many newspapers is an important contributory cause of eye fatigue and impaired vision.

MUCH has been said in the lay press concerning the cure of deafness by taking a violent dip in an aeroplane from a great height. Up to date there is no proof of any cure of deafness through that means, though there are records of fatalities occurring as a direct result of such attempts. The latest report of this character coming to our notice is one from Sioux City, Iowa, where in an effort to restore the speech and hearing of a twenty-year old girl, she and two others were killed instantly when the aeroplane in which they were riding crashed from an altitude of three thousand feet. Collapse of the wings when the pilot tried to right the plane after a long drop was the cause of the accident. Some people seem willing to try most anything in order to procure relief from an ailment, but the public in general should be advised that this aeroplane stunt to restore hearing has nothing to back it up.

ACCORDING to newspaper reports Greencastle has a County Child Board of Health and its officers are all laymen. They all get into the limelight, though the Child Hygiene Division of the Indiana State Board of Health gets some publicity. Emphasis is placed on the announcement that all clinics are to be free. Probably several of the Greencastle medical men will be called upon

to render services, all of which will be free, and we doubt if a mother's son of them gets any credit for the time and skill devoted to the work. Just why should medical services be free to all of the children of Greencastle, irrespective of the financial standing of the parents, as intimated in the newspaper clipping which has been received. No rational minded individual would object to free medical services for the worthy poor, but why pauperize and make dependent those able to pay, and does such conduct really help Greencastle?

ACCORDING to the *Journal of Medicine of Cincinnati*, a Cincinnati physician while in Germany purchased a new biological product and ordered it sent to the United States. When it arrived it was refused admission by the customs officials and this refusal was sustained by authorities in Washington. The product is not made in the United States but undoubtedly the decision was in the interest of American manufacturers who probably would like to force American consumers to use something which they think is "just as good." As the *Journal of Medicine* well says, "it is bad enough for sick people to have to pay an exorbitant tariff on either instruments or healing agents, but when they are deprived of true remedies simply because they live in the United States, one wonders what has become of our boasted freedom? We claim to be the richest nation in the world, but this is conduct unbecoming the smallest, poorest, and weakest of all the nations."

IN the May number of THE JOURNAL we had something to say concerning one styling himself Frank McCoy, Health Specialist, who offers to send a health service column to any newspaper that will accept it. Some of the advice offered by McCoy is very dangerous. No reputable newspaper should have anything to do with a layman like McCoy who at best furnishes advice that for the most part is untrustworthy. We suggest that every county medical society in Indiana should make an effort to have the newspapers in their several communities use the copy furnished by the Bureau of Publicity of our Association, and at the same time offer to conduct a health column under the auspices of the society for the purpose of spreading trustworthy information concerning individual and community health problems. There is no question but that the public does need education concerning health matters, but that education should not come from laymen or quacks.

FOR many years we have been advocating a safe and sane Fourth of July. The campaign was started by the American Medical Association and has been promoted by various newspapers, magazines, and public speakers. However, the list of fatalities and injuries occurring during the Fourth of July period of this year shows that we



have not accomplished all that could be accomplished if we had put forth a united effort to prohibit the sale of dangerous explosives. When we make it impossible for "Young America" to procure the deadly cannon firecracker, the dangerous devil-chasers, and other things of like character manufactured and sold for the purpose of celebrating the glorious Fourth with some kind of explosive, then and then only will we have a safe and sane Fourth of July. The medical profession ought to inaugurate a campaign that will have as its object the nation-wide prevention of the sale of explosives of any character to be used in celebrating the Fourth of July or any other occasion.

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SOME municipal milk commissions have as their slogan, "Clean milk rather than cleaned milk." However, we are strong for not only clean milk but pasteurized milk from tuberculin tested cows. Milk plays such an important part in the diet of our people, and particularly children, that boards of health should use every effort to guard the safety of the milk supply of our cities and towns. It is reported that Montreal has had eight thousand cases of typhoid fever and eight hundred deaths from the disease within the last three months and all because of a milk supply that was not properly inspected and certified. Not only did this typhoid epidemic cause a large amount of morbidity and mortality in Montreal, but it cost the merchants and hotels of Montreal a fabulous sum as a direct result of the danger to travelers, which so many people avoided by staying away from the city. Therefore, aside from the question of health, a clean and healthful milk supply is a matter of dollars and cents to the mercantile interests.

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AT the present time we are hearing a good deal about denicotinized tobacco, and efforts are being made to secure the endorsement by physicians of a tobacco which is said to have most of the nicotine removed. Well, we have tried denicotinized tobacco and cannot say that it is much different from any other unpalatable tobacco. The arguments in its favor are not very impressive, and the use of denicotinized tobacco is not attended with any satisfying results nor feeling that harmful effects have been eliminated any more than in the ordinary tobacco. When we come right down to brass tacks this question of the use of tobacco resolves itself into the personal equation as to harmful effects. Some individuals are more sensitive to tobacco than are others, and in any person its excessive use may be very harmful. To millions of people tobacco in moderation is a solace, and its use attended with little or no ill-effects. To some it is injurious, and especially when its use is carried to excess. The personal equation ought to govern in estimating the harm that is done.

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IN an editorial on "Limitations of Goiter Prophylaxis," the *Journal of the A. M. A.*, July

9, 1927, says that it should be recalled that iodine used in treating goiter is a two-edged sword. When used injudiciously in either improper doses or in certain types of goiter which are made worse by such medication, iodine may inflict irreparable harm. Only the well-trained and experienced medical practitioner should undertake to treat goiter. This is timely advice and should be impressed upon a lot of school teachers, Red Cross nurses, and others who are attempting to prescribe treatment for goiter in a rather empirical way by advising young women and girls to take iodine in the form of iodine salts or some of the other well-advertised iodine preparations. In fact, there are not a few goiter patients who are attempting self-prescribing as a result of a lot of misinformation that is contained in health columns in our newspapers and in advice that is given in public talks and in conversation without intelligent and trustworthy basis for the advice.

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WE are inclined to believe that most of the health resorts and many of the famous watering places abroad would lose their popularity if prices were cut so that the average person could meet the expense of a sojourn at those places. In reality what they have to recommend them other than climate and scenery is an orderly regime that applies to diet, rest, exercise, and amusement. So far as medicinal water is concerned you can get that at home and drink it at far less cost than is taxed against you at any of the resorts. At home a patient will not submit to the regulations and discipline that he submits to when he is in a sanatorium or a health resort of any kind, but if he would resort to the same regulation and discipline he would accomplish equally as good results as are secured at resorts, the only difference being that change of scene and environment alone are valuable aids to health. In the final analysis, we must recognize that for many of our patients we fail to get the best results because we neglect regime, or, in other words, to regulate the habits and the physical surroundings of patients.

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THE use of stock vaccine in the preventive treatment of colds is discussed by Repplier and Leaman in the *Journal of Industrial Hygiene* for March, 1927. The authors give a report of 135 cases who presumably were suffering from recurring attacks of rhinitis due to their lowered resistance to the ever-prevalent bacteria of the respiratory group. The patients were inoculated in the fall of 1925 and out of the total number over thirty per cent were completely successful in preventing colds, and in more than fifty-two per cent there was a markedly increased resistance to upper respiratory involvement for a period of one year. A reaction, either local or general, to the inoculation, seems to be followed by a higher degree of immunity. This seems to carry out the generally accepted theory that in order to create immunity it is necessary to have at least a slight

reaction. The experience of these investigators is duplicated by the experience of others who have been using vaccines in the preventive treatment of colds, as it also verifies the assertion often made in the columns of this journal that vaccines are about "a fifty-fifty shot," but at that are worth using.

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DON'T delude yourself with the belief that you can get something for nothing. This admonition is justified at the present time when solicitors are trying to make every physician in Indiana believe that as a result of his prominence in the community and the value of his name, a confidential book offer is being made to him as a purely advertising feature. Remember that when a set of books or anything else is held in reserve for you as a pure donation in return for the use of your name, the same offer has been made to everyone else in the neighborhood, and there is a string tied to the offer which will prove disastrous when it is pulled. Do not expect something for nothing, and above everything else, don't sign any contracts without reading them carefully, and without an agent looking over your shoulder to attract your attention when you are about ready to see the "catch." Another good rule is to refuse to pay for any goods until you have received and inspected them. This rule is indicated in view of some offers now being made by tricky dealers in physicians' supplies that are advertised as being sold at bargain prices because procured at bankrupt sales. As a matter of fact the instruments and other materials so offered are of poor quality.

### GOLFERS, ATTENTION!

The annual Golf Tournament for the championship of the Indiana State Medical Association, will be held this year at the Indianapolis Country Club on the opening day of the convention, September 28th. The committee is planning on the best golf tournament and the largest prize list in the history of the Association. Those who wish to compete for prizes are asked to send their club handicaps, or in case they do not belong to a club their five lowest scores, to the chairman of the Golf Committee, C. A. Weller, Hume-Mansur Building, Indianapolis, Indiana. These must be in the hands of the chairman not later than September 10th.

In order that members of the House of Delegates, and all those who are unable to play in the afternoon, may compete, the tournament, which is to be for 18 holes medal play, will begin at 10 a. m. All other golfers will start their play in the afternoon, the regular starting time being 12 o'clock. Luncheon will be served at the Country Club.

Don't forget to send your handicaps.

C. A. WELLER,  
Chairman Golf Committee.

WHEN we read an account of the expenses of other state medical associations in maintaining medical defense we feel like crowing a little concerning the splendid management of the medical defense feature of our own Indiana State Medical Association. Started many years ago by a tax of seventy-five cents per member, the medical defense feature has been maintained continuously at an expense less than the amount appropriated, and quite recently some of the reserve fund in the medical defense treasury has, as a result of constitutional provision, been diverted to the general fund. Throughout the entire time that the medical defense feature has been in operation no member entitled to defense in malpractice suits has been denied such attention, and hundreds of cases have been carried to a successful end. The Association does not pay judgments, but it does defend, and that is what the average physician requires. In a large percentage of the cases the member who is sued for malpractice did not have any other insurance than that provided by the Association, and when it is taken into consideration that in a few instances the maximum amount was spent for defense, it can be seen that the unfortunate members have been saved a large amount of money as a direct result of the medical defense feature of the Association.

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THE lay press often publishes reading matter and advertisements concerning some phase of health which positively are dangerous to say nothing of playing upon the credulity of the public and swindling patrons. When the danger of this sort of publicity is pointed out to editors and newspaper proprietors they blandly inform us that they were innocent of wrong-doing. As a matter of fact they do not want to know the truth, for usually they are quite aware that they are aiding and abetting a fraud, but it is profitable. In reality there is no excuse for ignorance, for any newspaper editor and proprietor can, within a very few hours, or days at the most, obtain absolutely reliable information concerning the trustworthiness of any advertising or any reading article that is submitted to them. Even some of the organizations to which newspaper editors and proprietors belong will give advice as to the fraudulent character of any advertising, and if the information cannot be obtained from them it certainly can be obtained elsewhere without much effort. As the small boy says, "It is easier to be bad than to be good," and inasmuch as quack medical advertising of every kind pays handsomely, the average newspaper proprietor shuts his eyes to everything except the check that pays for the advertising.

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THE president of the Rockefeller Foundation says that physicians of the country can make or break a public health program inasmuch as it is they who diagnose maladies, report cases of communicable disease, educate their patients, make



health examinations, give advice about personal hygiene, and influence public opinion. He says that it makes a great deal of difference whether physicians are committed to the modern idea of prevention, for the progress of public health is largely due to the leadership of doctors of imagination and public spirit. We quite agree with him that our medical schools must produce doctors of a new type in that they will pay more attention to the idea of preventing rather than curing disease. Above everything else public opinion must be moulded to the idea that disease prevention as well as the promotion of health will depend upon the development of scientific research and the work of educated and trained medical men. Nothing will be gained by listening to the vagaries of the cults and the pseudo-scientific men who aim to have their influence felt because of the commercial advantage thus obtained. The Rockefeller Foundation has done much toward health progress and it has been wise in insisting upon being a partner and not a patron in the enterprises with which it has become interested.

**"The State Medical Frolic,"** a production by the doctors, for the doctors, and of the doctors, will be the feature attraction of the annual smoker upon the opening night of the annual State Medical Association meeting Wednesday, September 28th. The production, produced and staged by the one and only original cast of Indianapolis Medical Society artists, is a burlesque on the occurrences in the life of every physician both in the office and hospital. It elaborates the faults and burlesques the qualities of the physician with the intention of provoking laughter without offense.

The party takes place at The Atheneum, Massachusetts avenue and Michigan street, Wednesday evening, September 28th. The curtain will be rung up at 8:15, the same hour as for any regular show, this being a regular two-act performance. If you are over twenty-one years of age and under ninety-two, don't miss this party and the big smoker following. Everything will be free so as not to eliminate those of Scotch descent.

**JOHN M. TAYLOR,**

Chairman, Entertainment Committee.

THIS is the time of the year when directory frauds are promoted under the claim of being legitimate directory enterprises. The usual scheme is to solicit over the telephone for listings of advertising in directories which have high-sounding names and which are purely promotion enterprises. Physicians are asked to go into church directories, or handbooks published by lodges or other organizations. Not one out of twenty of these schemes is worthy of patronage. Then there is the promoter who is getting up a directory

of physicians, sometimes local, other times state, and occasionally a national directory. One of the profitable schemes is to get up a directory of specialists, and seldom is any discrimination used in weeding out the quacks or those not entitled to representation. In reality there is neither room nor need for any other directory than the American Medical Association directory which is the only one that is absolutely trustworthy and comprehensive. Aside from this there are the directories of such enterprises as the American College of Surgeons, the American College of Physicians, the Board for Ophthalmic Examinations, the Board of Otolaryngologic Examinations, and the membership lists of the special societies published in book form. These are all legitimate and trustworthy directories. What more could be wished? Physicians will be wise if they turn down everything else and by so doing save money as well as keep out of the clutches of promoters.

WE recently have had a peculiar experience. A wealthy manufacturer makes the statement that there is no logical reason why he should pay more for medical and surgical services than the poorest workman in his factory pays for the same services. He very ignorantly classes medical services along with dry goods, boots and shoes, and other commodities that for certain standards or quality are sold at fixed prices. When asked why he didn't put legal services on the same plane he replied that he paid his lawyer what was asked because he couldn't get out of it. (We happen to know that he paid his lawyer one thousand dollars for a comparatively trivial service). By inference we judge that he gets out of the payment of just medical and surgical bills by a sort of specious argument such as here repeated. To our notion what he needs is a lawsuit to compel him to pay a decent medical and surgical fee, and then he will have more respect for the members of the medical profession and what they can do for him. This reminds us of what the chairman of the public policy committee of the Illinois State Medical Society says, which we herewith quote: "More and more the public becomes resentful of paying the doctors' bills because of the reason that if millions of dollars of medical service is being given away, the public has a right to assume that it is either not worth much, or by some legerdemaine the men engaged in the practice of medicine are miraculously provided for financially."

THE American Foundation, an incorporated society with a large number of very prominent businessmen and statesmen as directors, is interested in doing away with war. The claim is made that every dispute can be settled by some peaceable means; if not by diplomatic methods or mediation, then by conciliation, or arbitration by judicial settlement. To that end the Foundation is offering

a proposed general treaty for the specific settlement of international disputes which it is hoped that the principal nations of the world will accept. We are very much in sympathy with what the Foundation is attempting to do and hope that something may be accomplished in the way of outlawing war, but until there is some more favorable consideration of the subject by other nations than the United States we are in favor of maintaining an army and navy that is sufficient to repel invasion and maintain our rights and privileges. The proposal of the American Foundation is worthy of the serious consideration of all foreign nations, and we hope that something tangible will result from the efforts being put forth, though we haven't a particle of confidence in the desire or intention of some of the European nations to enter into any pact or agreement that will prevent them from wars of aggression. Our sincere desire for world peace should not interfere with any program that calls for the strengthening of our army and navy so that it compares favorably with the naval and military forces of any other country of the world.

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THE Bureau of Investigation of the A. M. A. has uncovered a scheme for exploiting doctors known as the National Medical Bureau, Inc., with offices in South Bend. According to the *Journal of the A. M. A.* physicians are being circularized, and the letters sent to individual physicians state that the concern is about to appoint a physician in his locality to care for its members. It is explained that the appointee will receive fifty per cent of the monthly membership fees in payment for his services, and in addition he will receive all of the regular revenue he normally derives from his medicines, drugs, medical supplies and surgical operations. As a further inducement to apply for the appointment, the physician is told that if selected he automatically is made the family physician in more than five hundred homes of the city whereby he can quickly build a practice that normally would take from ten to twenty years. The circular letter further says that the doctor's monthly checks will average \$250. These statements, the *Journal of the A. M. A.* says, if they mean anything, mean that the physician who signs up with the National Medical Bureau practically agrees to take care of five hundred families at \$250 per month, or at the rate of fifty cents per month per family. Doubtless the medical service that such families would get would be in keeping with the amount paid the physician. Investigations show that the concern is not incorporated, and it seems to be run by one A. M. Nadel, who profits by exploiting medical men.

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IN Washington some rabid prohibitionists are organizing what some newspapers are disposed to call "The Snooper Society." In reality it is a society composed of representatives, one or more to each city block, who pledge themselves to

spy upon their neighbors with a view to passing judgment upon private conduct and especially as it pertains to the use of alcoholic beverages. The man who uses eau de quinine on his hair, bay rum on his face, or whose breath smells of the alcoholic flavor of the family's pet medicine, will come in for suspicion, and the person who surreptitiously or otherwise indulges in a glass of mother's home-made wine probably will be brought before the court of the Snooper's Society, promptly found guilty, and sentenced to be shot at sunrise. If the Snooper's Society becomes at all popular in various cities and towns we shall have a fine lot of trouble-makers in every community, and unless we are much mistaken there will be a great increase in the work of local surgeons in extracting buckshot and rock salt from the skins of a few of the snoopers who get into too close proximity of the homes of respectable citizens who seriously object to having their private lives spied upon by trouble-making neighbors who, whether there is sufficient cause or not, find it to their purpose to stir up trouble. Well, if the idea of having Snoopers' Societies in every community takes well it is going to increase the sale and use of weapons of offense and defense, for we have an idea that clubbing and shooting parties will be very common.

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JOHN R. KISSINGER, who lives at Andrews, Huntington County, formerly a private in the United States Army, permitted himself to be infected by the yellow fever mosquito in 1900, for scientific purposes. The knowledge obtained by the yellow fever commission as a result of this experiment made it possible for the almost complete eradication of the disease from the surface of the earth. Although the government at present gives Kissinger a pension of one hundred dollars per month, yet that is not sufficient to support Kissinger and his wife, both of whom have suffered from illnesses and are now incapacitated for work. In commenting upon this, *Hygeia* says that, "The world builds monuments to military leaders who slaughter thousands. It permits a hero of the type of Kissinger to suffer from illness, want, from actual hunger, regardless of the fact that he was ready to offer his life to save the lives of thousands of men." We hope that this statement will be corrected, for within the last few weeks the Society for Medical Progress has taken the case in hand and purchased a home for Kissinger and his wife and will provide such other means as may be required, over and above the pension, in order to furnish the comforts of life. Usually it requires only that facts become known in order to awaken the generosity of some individuals or associations in furnishing help where needed, but we are quite willing to admit that all too frequently our heroes do not receive substantial recognition during their lives. Some of our heroes who are in want would appreciate the comforts of



life while living rather than promises of monuments and similar tributes after death.

THE governor has an article in the July issue of *The Columbian*, published in Indianapolis, entitled, "Indiana Tax Burden Materially Reduced Under the Present Administration." That is enough not only to make a horse laugh but make all the other animals laugh also. Well, that is in keeping with the governor's contention that he received \$2,500 from Stevenson, the Ku Klux Klan leader, who was responsible for the governor's election, for a horse that, according to quite trustworthy evidence, was not worth five hundred dollars. We feel disposed to ask the governor if he knows any more good jokes. If taxes in Indiana are lower we haven't heard anything about it. Evidently we needed the governor's joke to set us right. Furthermore, if taxes are lower we must have something coming to us, for we have paid more this year than ever before and there is good and sufficient reason for believing that we will pay more next year than we did this year, and yet we possess no more of this world's goods. The Republican party has gone into power on two or three occasions with a promise of lowering the taxes. The criterion upon which taxes are judged is the total amount paid by the individual. If the rate is lowered a penny or two, then the assessors are instructed to soak the taxpayers by raising the amount of the assessment, so that in the end the poor taxpayer pays more instead of less. At the same time he is asked to jump up and crack his heels together and shout for the pure joy of living because the Republicans in power have lowered the taxes. It is beautiful political logic to spring on the suffering taxpayer. All in THE JOURNAL office, several in number, heretofore have been dyed-in-the-wool Republicans, but we are not swallowing all this bunk put out by the present governor and other Republicans concerning tax burdens being materially reduced. There is nothing to it, and when it comes time to vote again perhaps we shall feel disposed to think a little.

MEDICAL journals, the existence of which depends upon quack medical advertising, are almost extinct. They will disappear altogether if physicians will refuse to accept them, even when subscriptions are complimentary. We have no fault to find with the privately-owned medical journal that maintains a high standard of ethics in not only the editorial pages but in the advertising pages as well, but we have nothing but disgust for the hypocritical newspaper, magazine or medical journal that preaches morality and right conduct in the editorial pages and then accepts pay for fraudulent advertising published in its advertising pages. The religious periodicals almost without exception have been guilty of this practice, and when their attention was called to it their excuse was that they could not exist without the

quack advertising. With this sort of alibi they eased their consciences but failed to take into consideration the fact that they were playing the part of hypocrites. The medical profession as a whole can be thankful that through the efforts of the *Journal of the A. M. A.* and the state association journals, all of which have a high standard of requirements for the acceptance of advertising, the situation has changed and it now is almost impossible for medical journals with quack medical advertising to exist. Here and there one is found floundering in the sea of uncertainty, and it would cease publication but for the faint-hearted support given by a few physicians who are not very discriminating when it comes to quality. Most of the subscriptions to these personally-owned journals are gratuitous, for the thinking men of the profession no longer pay their money for subscriptions nor give their patronage to journals whose existence depends upon the advertising of proprietary medicine, and advertisers who get their space on an exchange basis. The trend of the medical profession is improving, and the majority of physicians stand for high standards of excellence in everything, even in medical journals.

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## DEATHS

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EDWARD FREEMAN, M.D., of Osgood, died June 20th, after an illness of several years. Dr. Osgood was seventy-four years of age.

E. C. THOMAS, M.D., of Indianapolis, died July 3rd, aged seventy-one years. He graduated from the Indiana Medical College, Indianapolis, in 1878.

HARVEY VOYLES, M.D., of Bedford, died July 2nd, aged seventy-eight years. Dr. Voyles graduated from the University of Louisville School of Medicine in 1877.

PORTER K. DOBYNS, M.D., of Franklin, died recently. Dr. Dobyns was seventy-nine years of age. He graduated from the Medical College of Indiana, Indianapolis, in 1879.

WILLIAM BAKER, M.D., of Carmel, died June 30th, aged forty-three years. Dr. Baker graduated from the Indiana University School of Medicine, Indianapolis, in 1911. He was a member of the Hamilton County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

JOHN W. HAYS, M.D., of Albion, died recently, aged eighty-six years. Dr. Hays graduated from the Medical College of Ohio, Cincinnati, in 1872. He was a member of the Noble County Medical Society, the Indiana State Medical Association and the American Medical Association.

A. S. HOLLINGSWORTH, M.D., of Goshen, died July 10th, aged sixty years. Dr. Hollingsworth graduated from the Eclectic Medical College of Ohio, Cincinnati, in 1887. He was a member of the Elkhart County Medical Society, the Indiana State Medical Association and the American Medical Association.

JOHN W. ANDERSON, M.D., of Odon, died June 17th, aged seventy-two years. Dr. Anderson graduated from the Kentucky School of Medicine, Louisville, in 1881. He was a member of the Daviess-Martin County Medical Society, the Indiana State Medical Association and the American Medical Association.

W. P. FORD, M.D., of Boonville, died July 7th, aged sixty-eight years. Dr. Ford was secretary of the Warrick County Medical Society. He graduated from the University of Louisville School of Medicine, in 1894. He was a member of the Warrick County Medical Society and the Indiana State Medical Association.

BENJAMIN F. TETERS, M.D., of Middlebury, Indiana, died July 20, aged 66 years. Dr. Teters graduated from Jefferson Medical College, Philadelphia, in 1886. He was a member of the Elkhart County Medical Society, at one time serving as president of that society. He also was a member of the Indiana State Medical Association and the American Medical Association.

PAUL F. ROBINSON, M.D., of Indianapolis, died June 29th, as the result of injuries suffered in an automobile accident. Dr. Robinson was forty-seven years of age. He was coroner of Marion County at the time of his death. He graduated from the Medical College of Indiana, Indianapolis, in 1905 and was a member of the Marion County Medical Society, the Indiana State Medical Association and the American Medical Association.

WILLIAM H. FOREMAN, M.D., of Indianapolis, died July 23, aged 59 years. Dr. Foreman was associate professor of medicine on the faculty of the Indiana University School of Medicine. He also had served on the Indianapolis City Board of Health. He graduated from the Central College of Physicians and Surgeons in Indiana. He was a member of the Marion County Medical Society, the Indiana State Medical Association and was a Fellow of the American Medical Association.

## NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DOROTHY UPCHURCH WELBORN, wife of Dr. James Y. Welborn, of Evansville, died July 12th, aged thirty-one years.

DR. RUDOLPH YUNG, of Terre Haute, sailed July 21st, for Munich and Berne, Switzerland, to attend two international medical conferences.

DR. JOHN S. RAGAN, of Plainfield, celebrated his fiftieth anniversary as a practitioner of medicine July 9th. Dr. Ragan is seventy-eight years of age.

DR. AND MRS. ALBERT E. BULSON, JR., of Fort Wayne, have recently returned from a fishing trip in northern Ontario.

THE Grant and Wabash County Medical Society held a meeting at Somerset, Indiana, July 21st. Papers were presented by Dr. Frank Abbott, of Indianapolis, and Dr. N. B. Powell, of Marion.

THE United States Civil Service Commission announces open competitive examination for Social Worker (Psychiatric) and Junior Social Worker. Application for these positions will be received until December 30, 1927. Full information may be obtained from the U. S. Civil Service Commission, Washington, D. C.

AT the annual meeting of the National Board of Medical Examiners, held at Washington, D.C., May 15th, Dr. Walter L. Bierring, Des Moines, was elected president for the ensuing year and Dr. John S. Rodman, Philadelphia, secretary. Directors elected are Surgeon General M. W. Ireland, Hugh S. Cumming, Edward R. Stitt and John Whitridge Williams.

AFTER about thirty-eight years' service as a teacher in Indiana University School of Medicine and its predecessor, and for the last four years professor of surgery of the head and neck, Dr. John F. Barnhill, of Indianapolis, has announced his retirement from active teaching duty. He will remain with the school in an advisory capacity and continue the practice of medicine.

DURING the year 1926, the Rockefeller Foundation provided either directly or through other agencies, fellowships for 889 persons from forty-eight countries; of these, 386 fellows crossed national boundaries to pursue their studies. During 1926 the Foundation contributed to the budget of the National Committee for Mental Hygiene, including funds for fellowships for the training



of personnel, and also made gifts to the Canadian National Committee for Mental Hygiene which is granting fellowships to advanced students.

IN 1912, Drs. S. A. Clark, R. L. Sensenich and Charles S. Bosenbury, of South Bend, made a joint subscription of \$500 to supplement a \$500 public appropriation for a medical collection in the South Bend Public Library. For their own shelves they gave reference books. The collection now numbers three thousand volumes and fifty periodicals of technical interest to physicians. The books are either up-to-date books on medical matters or are of great historical importance to the profession. The fund for maintenance is furnished by the board of education as a part of the regular library appropriation. This fund is supplemented annually by the county medical society, and each year the president of the St. Joseph County Medical Society recommends to the city librarian the books which are of greatest value to physicians. Through this fund, the library subscribes regularly for many periodicals including current American, German, Canadian and English publications.

THE Thirty-third Annual Conference of County, City and Town Health Officers with the State Board of Health will be held at the Severin Hotel, Indianapolis, Tuesday and Wednesday, September 27th and 28th. The conference will begin at 10 o'clock on Tuesday and close with an afternoon session on Wednesday. The conference is held at this particular time because of the meeting of the Indiana State Medical Association, which will be held in Indianapolis, beginning with the opening session on Wednesday evening, September 28th and continuing until Friday, September 30th. The fact that the Health Officers' Conference is to be held in relation to the State Association meeting should insure a large attendance at the conference and also increase the attendance at the Association meeting, because a majority of the Health Officers of the state are members of the State Association. The State Board of Health is preparing a program for the conference that will emphasize the principal public health problems of the state at this time, such as immunization against diphtheria, control and prevention of typhoid fever, supervision and protection of water supplies and milk supplies, better collection of vital statistics, maternity and infancy hygiene and general sanitary improvement throughout the state. Every health officer of the state should attend both the conference and the meeting of the State Association.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the A. M. A.:

H. K. Mulford Co.:

Antivenin (Nearctic Crotalidae)-Mulford.

## SOCIETIES AND INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

June 20, 1927.

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D., chairman; Murray N. Hadley, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held June 13th read and approved.

The release, "A Hoosier Hero" was read, corrected and approved for publication Monday, June 27th.

Report received upon meeting at Rushville Kiwanis Club, June 9th.

Secretary was authorized to collect material which could be used as a basis for an article upon liver treatment in pernicious anemia.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole June 27, 1927.

WM. N. WISHARD, M.D.,  
Chairman,  
THOMAS A. HENDRICKS,  
Secretary.

### BUREAU OF PUBLICITY

June 27, 1927.

Meeting called to order at 4:00 o'clock.

Present: Wm. N. Wishard, M.D., chairman; J. A. MacDonald, M.D., by proxy, and Thomas A. Hendricks.

The minutes of the meeting held June 13th read and approved.

The release, "Safe and Sane July 4th" read, corrected and approved for publication Saturday, July 2nd.

Speaker obtained to fill engagement at the Newcastle Rotary Club, July 20th.

Letter received from the vice-chairman of the American Red Cross giving a report on the Francisco Mine Disaster Relief, near Princeton, Indiana, December 9, 1926. A summary of this report follows:

The Francisco explosion was the second severe disaster in Gibson county in less than two years. The mid-western tornado visiting Princeton, March, 1925, and the Francisco disaster coming December 9, 1926.

The Gibson County Chapter of the American Red Cross rendered emergency service and Red Cross national officials came immediately to the scene of the explosion. The American Red Cross undertook the work of rehabilitation. During the emergency period relief in some form was given to about 200 men.

A canteen service was established and food, clothing and supplies were distributed to the rescue squads. Every family affected was visited. The report speaks of the excellent co-operation between the Red Cross and the local mine and union officials. Seventy-two families were affected by the disaster. Thirty-seven men were killed and twenty others injured. Forty-eight families received permanent relief. The relief fund totaled \$21,127.19.

The Bureau also received a pamphlet, "Periodic Health Examination," published by the Wisconsin State Board of Health, from the secretary of the Wisconsin State Medical Society. The pamphlet has for its motto, "An ounce of prevention is worth a pound of cure." It is being distributed to the Wisconsin profession in order that physicians may put these pamphlets on their office table or mail them to patients, acquaintances, club members, etc.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole July 11, 1927.

WM. N. WISHARD, M.D.,  
Chairman,  
THOMAS A. HENDRICKS,  
Secretary.



BUREAU OF PUBLICITY

July 11, 1927.

Meeting called to order at 5:00 o'clock.

Present: Wm. N. Wishard, M.D., chairman; Frank W. Cregor, president; J. A. MacDonald, M.D.; Murray N. Hadley, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held June 27th, read, corrected and approved.

The following bills were approved for payment:

The Kautz Stationery Co.	\$ 2.45
Remington Typewriter Co.	2.45
Central Press Clipping Service	7.50
Gaw-O'Hara Envelope Co.	29.80

Total \$42.20

An editorial, "Unethical to Advertise," appearing in the June 28th issue of the *Greenfield Daily Reporter*, came to the notice of the Bureau. Excerpts from this editorial follow:

"Why should it be more ethical for a physician to advertise his ability than for a department store or an automobile dealer?"

"Newspapers are being accused of being mercenary yet publications in Indiana for the past two or three years have carried thousands of dollars' worth of this medical publicity absolutely free."

"The medical association in Indiana for the past three or four years has received a publicity that simply could not have been bought, that national advertisers would have paid millions to receive."

The secretary was instructed to send the following letter to the editor of the *Greenfield Daily Reporter*, explaining the purpose of the Bureau.

Mrs. Viola B. Spencer,  
Managing Editor Daily Reporter,  
Greenfield, Indiana.

Dear Mrs. Spencer:

Your editorial "Unethical to Advertise" in the June 28th issue of the *Greenfield Daily Reporter*, gave us an entirely new view of the weekly health articles prepared by our Bureau of Publicity, which have appeared in your paper and many other dailies of the state for the past two years. Before commenting on the editorial we wish to thank you for using our releases from week to week.

Judging from your editorial, apparently you have misunderstood the object of our publicity campaign. It is wholly a campaign of education. For many years publishers and editors have said that the medical profession "should come out of its shell" and give the public information on health subjects that is readable, understandable, and authentic. With this in mind the Bureau of Publicity of the Indiana State Medical Association was founded in 1924 and has been working ever since to supply the people of Indiana with authentic information upon health subjects.

The Bureau, composed of four physicians, meets weekly to prepare these articles which are released to the press of Indiana. The Bureau is composed of busy physicians, in active practice. These men take valuable time away from their work. They get absolutely nothing for their labor in order that everything may be done to insure the authenticity of these articles.

The Bureau is especially careful that none of these articles shall be given over to personal puffery for any individual physician. In fact, the name of no individual physician now living in the state of Indiana has ever been mentioned. If names of individual practicing physicians were mentioned that certainly would be advertising and your inference would be correct.

Care is taken that no statement is made that cannot be backed by scientific facts. You can understand, under the conditions, why your editorial, challenging the motives behind these articles, has aroused a little adverse comment among the profession.

We are merely attempting to do in the best way we can that which such publications as the *Saturday Evening Post* has asked—even demanded—that the profession do, give the public authentic information on health subjects in clear, understandable language.

We are sending you a copy of our 1926 handbook for members of our House of Delegates containing the report of the Publicity Bureau, pages 16, 17 and 18.

This may give you a little better understanding of the purposes and the ideas behind the work of the Bureau.

Yours sincerely,  
(Signed) THOMAS A. HENDRICKS,  
Executive Secretary.

The release, "Infant Care in Warm Weather" was approved for publication Monday, July 18th.

The secretary was instructed to write a letter to the American Medical Association offering the services of the Bureau to collect and forward news items for publication in the *Journal of the A. M. A.*

The Bureau instructed the secretary to write to the chairman of the 1927 Convention Arrangements Committee expressing a desire to co-operate with the local committee on convention arrangements in every way possible.

Suggestion was made that one of the weekly releases of the Bureau of Publicity be based upon the annual state medical meeting. This is in accordance with the custom for the last few years.

It was also suggested that a large "Welcome" banner be made by the Bureau which could be used at each annual state meeting.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole July 19, 1927.

WM. N. WISHARD, M.D.,  
Chairman,  
THOMAS A. HENDRICKS,  
Secretary.

BUREAU OF PUBLICITY

July 18, 1927.

Meeting called to order at 4:45 P. M.

Present: Wm. N. Wishard, M.D., Chairman; J. A. MacDonald, M.D., by proxy, and Thomas A. Hendricks, Executive Secretary.

The minutes of the meeting held July 11 read, corrected and approved.

The release on "Rabies" read, corrected and approved for publication on July 25.

Letter received from the editor of the *Journal of the American Medical Association* requesting that the Bureau supply items of medical interest for publication in the weekly column devoted to medical activities of the various states in the *Journal of the American Medical Association*.

The secretary submitted the following suggested outline for annual report. This outline was gone over, item by item and corrections and changes suggested.

The above minutes were approved in each separate part and as a whole July 25.

Wm. N. Wishard, M.D., Chairman.  
Thomas A. Hendricks, Secretary.

TRUTH ABOUT MEDICINES

NEONAL.—N-BUTYLETHYLBARBITURIC ACID.—Neonal differs from barbital (diethylbarbituric acid) in that one of the ethyl groups of the former is replaced by a normal butyl group. The actions and uses of neonal are essentially similar to those of barbital, but it is about three times as active as the latter; hence it is used in correspondingly smaller doses. It is claimed that it exerts a sedative action to an exceptional degree, and that it is useful therefore in high nervous tension, neuroses and other conditions in which a sedative is required. Neon al



is supplied in powder and in 0.1 Gm. tablets. Abbott Laboratories, North Chicago, Ill. (*Jour. A. M. A.*, June 4, 1927, p. 1802).

**POLLEN EXTRACTS-CUTTER.**—These are now marketed in capillary tubes and in packages consisting of three vials representing graduated concentrations. In addition to the products listed in New and Nonofficial Remedies, 1927, p. 34, the following have been accepted: Alkali Weed Pollen Extract-Cutter; All Scale Pollen Extract-Cutter; Box Elder Pollen Extract-Cutter; Burning Bush Pollen Extract-Cutter; Corn Pollen Extract-Cutter; Fox-tail Pollen Extract-Cutter; Mountain Cedar Pollen Extract-Cutter; Tumbleweed Pollen Extract-Cutter; Western Water Hemp Pollen Extract-Cutter. Cutter Laboratory, Berkeley, Calif.

**POLLEN EXTRACTS (GLYCERO-SALINE)-MULFORD.**—Liquids obtained by extracting the dried pollen of plants with a liquid consisting of 66 2/3 per cent of glycerin and 33 1/3 per cent of saturated sodium chloride solution. For a discussion of the actions and uses see Allergic Protein Preparations (New and Nonofficial Remedies, 1927, p. 23). Pollen extracts (glycero-saline)-Mulford are marketed in bulk treatment packages and in treatment sets consisting of: First series (doses 1 to 5, inclusive); second series (doses 6 to 10 inclusive); third series (doses 11 to 15, inclusive); complete series (doses 1 to 15, inclusive); fourth series (doses 16 to 20, inclusive). The following preparations have been accepted: Lamb's Quarters Pollen Extract (Glycero-Saline)-Mulford; Ragweed Pollen Extract (Glycero-Saline)-Mulford; Timothy Pollen Extract (Glycero-Saline)-Mulford; Wormwood Pollen Extract (Glycero-Saline)-Mulford. H. K. Mulford Co., Philadelphia. (*Jour. A. M. A.*, June 11, 1927, p. 1891).

**ETHYLENE-C. L. P.**—A brand of ethylene for anesthesia—N. N. R. For a discussion of the actions and uses see New and Nonofficial Remedies, 1927, p. 50. Certified Laboratory Products, Glendale, Calif.

**PROTEIN EXTRACTS DIAGNOSTIC-P. D. & Co.**—In addition to the products listed in New and Nonofficial Remedies, 1927, p. 40, the following have been accepted: Alfalfa Pollen Protein Extract Diagnostic-P. D. & Co.; Bean (Kidney) Protein Extract Diagnostic-P. D. & Co. Parke, Davis & Co., Detroit.

**TYPHOID VACCINE (PROPHYLACTIC) (NEW AND NONOFFICIAL REMEDIES, 1927, p. 369).**—This product is also marketed in packages of one 20 cc. vial containing 1,000 million killed typhoid bacilli per cc. Parke, Davis & Co., Detroit.

**TYPHOID-PARATYPHOID VACCINE (PROPHYLACTIC) (NEW AND NONOFFICIAL REMEDIES, 1927, p. 369).**—This product is also marketed in packages of one 20 cc. vial containing 1,000 million killed typhoid bacilli and 750 million each of killed paratyphoid bacilli A and B per cc. Parke, Davis & Co., Detroit.

**HORLICK'S MALTROSE-DEXTRIN MILK MODIFIER.**—A mixture containing approximately: maltose, 63 per cent; dextrin, 19.5 per cent; protein, 11.5 per cent; fat, 1.4 per cent; moisture, 2 per cent; and ash, 2.6 per cent. On the claim that maltose is more readily assimilable than other forms of sugar, this product is proposed to supplement the carbohydrate of cow's milk. Horlick's Malted Milk Corporation, Racine, Wis. (*Jour. A. M. A.*, June 18, 1927, p. 1967).

**B. ACIDOPHILUS MILK-FAIRCHILD.**—A whole milk cultured with *B. acidophilus*. It contains not less than 50 millions of viable organisms (*B. acidophilus*) per cc. at the time of sale. For a discussion of the actions and uses of bacillus acidophilus preparations, see New and Nonofficial Remedies, 1927, p. 216, "Lactic Acid-Producing Organisms and Preparations." Fairchild Bros. & Foster, New York. (*Jour. A. M. A.*, June 25, 1927, p. 2035).

### PROPAGANDA FOR REFORM

**THE ORIGIN OF VITAMIN D.**—The antirachitic substance, vitamin D, occurs in some fish oils—notably in

cod liver oil—in egg yolk fat, and to a small extent in milk fat. As a rule the vegetable fats are not antirachitic. A few instances of undoubted potency in oils of plant origin have been ascribed to the effect of solar irradiation of the products incident to their commercial preparation. This is true of coconut oil prepared from sun-dried copra. Whereas the other vitamins appear to originate in the vegetable kingdom, this is not the case with vitamin D. Experiments carried out to learn the origin of vitamin D in the cod-fish, raise the question as to whether vitamin D cannot actually be synthesized by certain species. These experiments also revealed that the oils of the herring and sardine rival the cod in antirachitic potency. (*Jour. A. M. A.*, June 4, 1927, p. 1807).

**PRODIGALUZ, A SPANISH NOSTRUM SOLD TO GULLIBLE AMERICANS.**—A nostrum for the alleged cure of all diseases of the eye has been exploited during the past year in some American newspapers and magazines under the name of "Prodigaluz." The preparation was claimed to be a general specific for diseases of the eye and to cure trachoma, ulcerations of the cornea, cataracts, gonorrheal conjunctivitis, progressive myopia, etc. The federal authorities reported the preparation to be a slightly turbid liquid, having a wine-like odor, and containing alcohol, potash, zinc sulphate and tannin. The Post Office Department issued a fraud order which will prevent the exploitation of this nostrum through the mails. (*Jour. A. M. A.*, June 4, 1927, p. 1831).

**BULGARA TABLETS-H. W. & D., CULTURE OF BACILLUS BULGARICUS-LEDERLE, CULTURE OF BACILLUS BULGARICUS-FAIRCHILD, GALACTENZYME TABLETS, LACTAMPOULE, LACTIC BACILLARY TABLETS-FAIRCHILD, AND VITALAIT CULTURE OF BACILLUS BULGARICUS OMITTED FROM N. N. R.**—The Council on Pharmacy and Chemistry decided to retain bacillus bulgaricus preparations in New and Nonofficial Remedies, provided that the claims for these were revised to show such preparations to be of value only in the preparation of soured milk, and, further, that all claims for their intestinal implantation and for their value as external applications be discontinued. The Council reports that the following products have been omitted from New and Nonofficial Remedies because acceptable revisions of the claims were not made: Bulgara Tablets-H. W. & D. (Hynson, Westcott & Dunning); Culture of Bacillus Bulgaricus-Lederle (Lederle Antitoxin Laboratories); Culture of Bacillus Bulgaricus-Fairchild, Lactampoule, Lactic Bacillary Tablets—Fairchild (Fairchild Bros. & Foster); Galactenzyme Tablets (Abbott Laboratories); and Vitalait Culture of Bacillus Bulgaricus (Vitalait Laboratory of California). (*Jour. A. M. A.*, June 4, 1927, p. 1831).

**THE SYNTHESIS OF THYROXIN.**—The announcement by Harington, in 1926, that thyroxin, instead of being a compound of tryptophan, is a tetraiodo derivative of the p-hydroxyphenyl ether of tyrosine, has been followed by a determination of its constitution. Following this, Harington and Barger prepared synthetic thyroxin. This has been shown to be identical with natural thyroxin. Thus, the first artificial production of a naturally occurring biologic product, the active principle of the thyroid gland has been accomplished. (*Jour. A. M. A.*, June 11, 1927, p. 1892).

**DIABETIC FOODS.**—A recent food inspection decision of the U. S. Department of Agriculture revokes the official definition of so-called diabetic foods, thus automatically placing such preparations in the class of drugs. The government holds that references to any disease condition in the labeling of such articles implies to the public that they are efficacious treatments, and it therefore asks manufacturers and distributors to omit any such references from their trade packages. An investigation showed that "diabetic foods" were being held out to sufferers from diabetes as treatments for their condition rather than as mere diabetic aids in the management of the disease. The action taken is a gratifying official



support of the efforts of the Council on Pharmacy and Chemistry to convince manufacturers that therapeutic recommendations should not have a place on a trade package. However, the Council has taken a liberal attitude and does not object to the naming of diseases on trade packages of medicinal foods, or to a name implying the use of the product in diabetes, provided the advertising makes it clear that the product is not offered as a cure or even as a remedy for the disease. The greater stringency of the attitude of the government arises, no doubt, from the fact that it is acting on the basis of a law, the letter of which refers only to the trade package and label. (*Jour. A. M. A.*, June 11, 1927, p. 1895).

**THE FLORAZONA FRAUD.**—The Postmaster General has issued a fraud order against the Florazona Corporation, New York City, debarring it from the use of the mails. The "Corporation" exploited Florazona, which was a bath powder claimed to bring about reduction of weight. The federal chemists found the preparation to be essentially sodium thiosulphate, with a small amount of baking soda and a trace of iodides and perfume. It was shown that the package of Florazona, which sold for \$3.50, could be manufactured for about 17½ cents. As is common in the advertising of fat-cure swindles, the advertisements for Florazona stressed the claim that, when using the preparation, it was unnecessary to exercise or diet. Yet, as is also usual in the sale of such fakes, after the purchaser had paid her money, she found that dieting was suggested. (*Jour. A. M. A.*, June 11, 1927, p. 1920).

**THE CUNNINGHAM TANK TREATMENT.**—For some eight years Dr. O. J. Cunningham of Kansas City, Mo., has been treating certain conditions by putting patients in a tank, under air pressure varying from 10 to 50 pounds to the square inch above ordinary atmospheric pressure. Patients are kept in the tank from a few hours to a month. Dr. Cunningham's thesis is that diabetes mellitus, pernicious anemia and carcinoma are due to pathogenic bacteria of the anaerobic type, and that the oxygen content of the tissues is greatly increased when the patients are put in the tank containing the compressed air. It does not appear that Dr. Cunningham's observations have been confirmed. There is reason to believe that Dr. Cunningham has allowed enthusiasm to run away with judgment. (*Jour. A. M. A.*, June 11, 1927, p. 1921).

**ERGOSTEROL.**—The present evidence indicates that ergosterol is the precursor of vitamin D, that is, the parent substance from which vitamin D is formed. It is probable that the activity of cholesterol produced by irradiation, is due to the presence of ergosterol in cholesterol. The biologic tests with irradiated ergosterol have been astounding. A daily dose of 0.0001 mg. of irradiated ergosterol has cured and prevented rickets in rats kept on a rachitogenic diet. Irradiated ergosterol is the most potent antirachitic substance known, 5 mg. being equivalent to approximately 1 liter of a good cod liver oil. (*Jour. A. M. A.*, June 18, 1927, p. 1969).

**ABSORPTION OF VITAMIN D THROUGH THE SKIN.**—The antirachitic factor, now commonly designated as vitamin D, which seems to be essential for the proper development and maintenance of the skeletal structures, apparently is not produced within the living body of man. The necessary supply is ordinarily derived either through the ingestion of antirachitic foods or through exposure of the skin to sunlight or ultraviolet rays. The last mentioned method is somewhat uncertain with respect to precise dosage. The alimentary path of introduction of the vitamin is usually the most convenient method for antirachitic therapy. Sometimes, though rarely, there may be barriers to its use; hence alternative procedures have been looked for. It has been found that the subcutaneous administration of cod liver oil may lead to curative results attributable to the fat-soluble vitamins. It has now been found that vitamin D as it is secured in irradiated sterols can be absorbed from the uninjured skin. The possibility of antirachitic therapy by inunction is thus presented. (*Jour. A. M. A.*, June 18, 1927, p. 1970).

**THE "CASS TREATMENT" TRICKERY.**—The "Cass Treatment for Rheumatism" was a particularly bold piece of Chicago mail-order quackery, conducted under the name of "Cass Laboratories." The Cass Laboratories were not laboratories; its alleged president, "Harvey L. Cass," who was featured throughout the advertising, did not exist but the concern was run by one H. L. Cassel, in association with his brother-in-law, one Joseph V. Creevy. The "treatment" consisted of baking soda tablets, of other tablets containing aspirin and cinchophen, and of some flavored epsom salt, as was shown by an analysis made by the A. M. A. Chemical Laboratory. In October, 1926, the Post Office Department called on the Cass Laboratories to show cause why a fraud order should not be issued against it. In February, 1927, Cassel submitted an affidavit to the Post Office Department, declaring that he was authorized and empowered to execute it on behalf of the Cass Laboratories, and swearing: "That the business heretofore conducted under the name Cass Laboratories has been discontinued and abandoned and will not be resumed at any time in the future." The facts were, that for a month or more before Cassel made this sworn statement, the name "Cass Laboratories" had been abandoned and the rheumatic public was receiving the same line of quackery under a new trade name: "H. L. Cass Corporation." It is to be hoped that in due time the Post Office authorities will issue a fraud order not only against the company itself, but against those conducting it. (*Jour. A. M. A.*, June 18, 1927, p. 1983).

**KEROSENE.**—Kerosene is a weak antiseptic and parasiticide and irritant to the skin. Therefore: It can be used for parasitic affections of the scalp. It is of some use for seborrheic dermatitis of the scalp and, if it has any effect in preventing the outfall of hair, it is presumably due to its irritating—stimulating—effect on the skin. But it does all these things in a crude, disagreeable way. All of them can be done more efficiently and much more accurately with drugs of definite composition. Its vogue as a hair tonic and hair restorer is largely due to that popular feeling, which has come down through the millenniums from our barbarous ancestors, that the efficiency of drugs is in proportion to their disagreeableness. (*Jour. A. M. A.*, June 25, 1927, p. 2048).

## ABSTRACTS

### DRESSING FOR BURNS

Harry S. Fist, Los Angeles (*Journal A. M. A.*, May 7, 1927), says that a dressing that presents several advantages may be prepared by dipping gauze into a hot, dilute, aqueous solution of pure gelatin, drying it, and then treating with solution of formaldehyde U. S. P. of half strength, and finally washing and drying. The result is a gauze that is unaffected by moisture; it will not stick to a granulating surface, and may be kept in a warm climate or sterilized in an autoclave. When this prepared gauze has been used as a dressing, granulation has proceeded with great rapidity. The gauze, when dry, is slightly stiffer than paraffined gauze but softens somewhat when moistened. If well diluted gelatin solution is used, the dressing is not too stiff for application to raw surfaces. Before the gauze is applied the surface should be well cleansed and then dried, preferably by means of hot air. The dressing should be removed daily, the wound cleansed and dried, and a new dressing applied. Pure gelatin is easily obtainable and should always be used.

### HARMLESS MUCOUS MEMBRANE IRRIGANT

Facts of importance in the preparation of a proper surgical irrigation fluid emphasized by Martin H. Fischer, Cincinnati, and R. W. Bledsoe, Covington, Ky. (*Journal A. M. A.*, June 11, 1927), are 1. *Uninjured cells of the human being require a minimum of 0.85 per cent sodium chloride in the water to prevent their swelling and, when the cells are injured and thus have an increased tendency to swell, a sodium chloride*



concentration above this value must be used. 2. Different salts, even when employed at the same concentration, are unequally effective in reducing such swelling. The salts of magnesium, calcium and strontium, for example, are far more powerful than the corresponding salts of sodium while still heavier metals like iron, zinc and mercury are most powerful of all. For this reason the use of a calcium salt with the sodium chloride in any irrigation fluid yields better results than the use of sodium chloride pure. In order to obtain an irrigating fluid suitable for human use, Fischer and Bledsoe prepared a mixture consisting of sodium chloride, 10.5; calcium chloride, 0.84; potassium chloride, 0.42; water, sufficient to make 1,000. This solution contains the three salts which Ringer originally found so favorable for the maintenance of a physiologic activity in surviving tissues and is, in this respect, therefore, a so-called physiologically balanced mixture. The solution is also "hypertonic" in that the concentration of the sodium chloride has been raised to the point at which it will prevent not only the swelling of uninjured human cells but also somewhat above this. The concentration of the calcium chloride is several times that of the original Ringer mixture. This high value is taken in order to maintain the dehydration effects of the various salts as long as possible; for while monovalent salts, through their more rapid diffusion, affect the inflamed tissues first, the dehydrating effects of calcium last longer, once this salt has diffused into the tissues. The following is a practically saturated solution of the foregoing salts in the correct proportions: sodium chloride, 263.7 Gm.; dried calcium chloride, 21 Gm.; potassium chloride, 10.6 Gm.; distilled water, sufficient to make 1,000 cc. When desired, for use, 20 cc. of this mixture is diluted to 500 cc. with distilled or freshly boiled water and thoroughly mixed. There is no harm in employing the solution in this or still higher concentration, but to do so in any concentration less than 20 cc. in the 500 of water is to employ a solution possessed of all the defects of plain water or an inadequately concentrated salt mixture. It is best to irrigate with the mixture at body temperature or a few degrees higher. Since boiling does not affect it, the stock or finished solution may readily be sterilized. It is well to remember also that the diffusion of salts into tissues takes time and that prolonged contact with the tissues is favorable to this end. As much time as possible should therefore be allowed between the separate fractions of an irrigation, and the patient should be asked not to blow his nose immediately after the final one. For injection, any douche arrangement may be used; but the time element should be remembered as well as the need of using an adequate volum of the irrigating fluid (from 500 to 1,000 cc.).

#### CURABILITY OF INTESTINAL TUBERCULOSIS

Lawrason Brown and Homer L. Sampson, Saranac Lake, N. Y. (*Journal A. M. A.*, May 7, 1927), assert that pathologic evidence can now be adduced to uphold the clinical observation that healing of intestinal tuberculosis can occur in properly diagnosed and treated cases. In their work they have been impressed by two features connected with relapse: first, its great rarity; and, second, its resistance to further treatment. In 463 cases, the treatment of which is discussed in this paper, relapse has been noted in only three instances. In one, a moderately advanced case, the intestinal complication had apparently healed and the patient had returned to work. After several months he began to have abdominal symptoms, which failed to respond to artificial heliotherapy or other forms of treatment and led to his death. A second case, moderately advanced, had improved considerably, became negative on roentgen-ray examination, but later was again positive. This patient is now alive and classified as well. The third patient was in a far advanced condition, which became negative on roentgen-ray study after treatment. This improvement was confirmed clinically. About this time the patient used the lamp

very intermittently. At a later date the roentgen-ray examination was again positive. This was confirmed by the clinical and symptomatic course of the disease. The patient is alive today, but the pulmonary tuberculosis is gradually progressing. Tuberculosis is a relapsing disease, and this tendency of the treated patients that apparently recover to remain well is strongly suggestive that their intestinal tuberculosis has completely healed. This is another argument in favor of prolonged treatment. It is, of course, not impossible for a second infection of the intestine to occur. Some pathologic observations would support this view. Complete healing of intestinal tuberculosis may take place in the presence of an advancing and ultimately fatal pulmonary tuberculosis. Five patients dying of pulmonary tuberculosis presented evidence of healed intestinal tuberculosis. Of 360 patients treated with artificial heliotherapy, of whom 119 are dead, 18 per cent did not obtain any benefit, 33 per cent were slightly or considerably helped, 25 per cent were markedly benefited, and 24 per cent (86 patients) were apparently cured of their secondary intestinal tuberculosis.

#### STRICTURE OF FEMALE URETHRA

Winfield Scott Pugh, New York (*Journal A. M. A.*, November 27, 1926), asserts that stricture of the urethra in women is common. The principal cause is a gonococcal infection. The pathologic changes are quite similar to those of the urethral stricture in the male. Its most common location is at the external meatus. The most common symptoms are frequency, urgency and dysuria. The diagnosis may always be established by the olivary tip or the bulbous bougie. Prognosis is good in soft infiltrations, while that of dense structures is doubtful. Treatment is by gentle dilation. Operative procedures should be avoided if possible.

#### ANESTHESIA

It is observed that during operations in which ethylene is employed as the anesthetic, there is an apparent increased bleeding from the surfaces made on cutting. In order to collect definite data on this point, David C. Straus and Henry H. Rubin, Chicago (*Journal A. M. A.*, January 29, 1927), undertook the study of the coagulation time and the bleeding time on twenty-five patients receiving ethylene gas for anesthesia. The conditions for which these patients were operated on were varied. Determinations of the coagulation time and the bleeding time were made immediately before, once during, directly after, and the day following the administration of the anesthetic. In practically every instance, the coagulation time was shortened during the administration of the anesthetic. This varied from one-half minute in some cases to three minutes. A further drop was noted at the termination of the anesthesia. In four cases, the time remained the same during as compared to before, although it dropped at the end of narcosis. In only one instance was there a prolongation of the time, this being one-half minute longer following the anesthesia as compared to that noted before. The most pronounced decrease in time was from six minutes before to two and one-half minutes after. This was observed in a case of common duct stone with jaundice. On the day following the operations, the coagulation time would increase, in many instances returning to that noted before the induction of anesthesia. The bleeding time showed a corresponding fall, although this was not as marked as in the case of the coagulation time.

#### SPECIALIST: WHAT SHALL WE DO WITH HIM?

Critics say that the medical specialist has caused to be thrust aside the old-fashioned family practitioner, for whose wise and kindly ministrations he has provided no adequate substitute; that he has increased inordinately the cost of medical treatment, making it a forbidding specter to be avoided or a painful burden to be borne by persons of moderate means; that he has lessened the



effectiveness (or at least added to the difficulties) of undergraduate medical education by causing the curriculum to become crowded and confused; that he is directly or indirectly responsible for the creation of many of the harmful medical cults which flourish in the land, building false hopes on the quicksands of pseudoscience. But, as a hospital administrator, what most troubles S. S. Goldwater, New York (*Journal A. M. A.*, May 28, 1927), is the fact that specialism, which in its proper sphere has served and continues to serve a highly useful purpose, has split the forces of medicine into numerous small bodies which, valuable as they may be for skirmishing purposes and in certain critical emergencies, are powerless to act as an effective unit in the endless struggle against disease. This distressing fact prompts the question whether anything can be done by means of hospital organization to promote the training of specialists under conditions that will conserve and develop in them what is soundest and most useful, while checking the growth of eccentricities which arise out of their professional isolation. The duty of medical administration is to facilitate the utilization of the potential resources of modern medicine in dealing with the needs of the individual patient. Can this purpose be most readily achieved in small hospitals, in larger general hospitals, in scattered special hospitals, or in assemblages of special hospitals popularly called medical centers? Of paramount importance to the present discussion is the impracticability of including within the contracted framework of a small hospital specialized departments of sufficient capacity to satisfy the legitimate needs of first-rate specialists. The hospital which is devoted to the practice of a single highly specialized branch of medicine or surgery, likewise suffers from pronounced limitations.

#### IMMUNITY IN TUBERCULOSIS

S. A. Petroff, Trudeau, N. Y. (*Journal A. M. A.*, July 23, 1927), asserts that the method of vaccination with living, virulent tubercle bacilli affords a means whereby immunity can be set up with apparently a very small amount of material. The dosage can be so regulated that a massive infection can be avoided. A mild disease without any clinical manifestation is actually being produced. However, it must be remembered that in order to keep this immunity, the inoculation must be continued. In other words, the focus with living organisms must persist for the continuance of a satisfactory immunization. It means that to obtain such immunity the price of actual infection must be paid. And again, in dealing with virulent organisms, one never knows what may happen in the individual when he is subjected to intercurrent disease. Supposing an immunity has been established with living, virulent organisms, what will prevent the breaking down of this resistance and the dissemination of the tubercle bacilli to some distant part of the body which has lost its immunity? Petroff believes that dead tubercle bacilli or some of their derivatives can be used safely and effectively in immunizing the human race.

#### RICKETS

Such factors as heredity, lack of exercise, cow's and human milk containing diets, and vitamins, Henry J. Gerstenberger, Cleveland (*Journal A. M. A.*, July 23, 1927), says all play merely secondarily etiologic roles to the primary and fundamental cause of rickets, namely, inadequate exposure to the actinic rays or their equivalent of growing human infants. The amount of exposure or the amount of antirachitic factor in the form of cod liver oil necessary to prevent rickets seems to bear a direct relationship to the rate of growth. In other words, as the rate of growth usually is greater the younger the infant, his antirachitic factor requirement likewise is greater, and paradoxical as it may seem to be, the younger the infant the greater, for instance, is the amount of cod liver oil necessary to insure freedom from rickets. The actual maximum amount of cod liver

oil required is not more than 1 cc., provided, of course, it is begun before the rickets develops. Therefore, in order to prevent rickets, the administration of cod liver oil or the exposure of the child to the actinic rays should be begun early, not later than the beginning of the second week of life. The great primary importance of the actinic rays to normal growth is evidenced by the fact that rickets occurs most severely and most frequently at the end of winter, and especially in those infants whose skins are pigmented. In preventing rickets in premature infants it seems necessary, in addition to giving an adequate supply of the antirachitic factor, to increase their protein and mineral intake, even when they are getting human milk as a diet. This can be done in a very simple manner by adding some boiled skimmed milk to the diet. If rickets has developed and if it is continuously and adequately treated with the antirachitic factor, likewise spasmophilia or tetany will not appear. In other words, idiopathic tetany or spasmophilia will not appear if rickets is properly prevented or treated. However, if the treatment is interrupted, as it is unintentionally in the spring and fall when sunshine is present irregularly, then the spasmophilic picture will appear and sooner or later will give evidence in the roentgenogram of some healing having taken place, and in the blood serum of a change from the figures characteristic of a low phosphorus rickets to those of what unfortunately has been called a "low calcium rickets." In other words, low calcium rickets and spasmophilia develop in human infants only over the route of primary low phosphorus rickets which has been peculiarly treated.

#### CHANCER OF NASAL SEPTUM

That a primary syphilitic infection of the nasal septum may not be as rare as generally supposed is indicated by three cases seen by Erwin P. Zeisler, Chicago (*Journal A. M. A.*, May 28, 1927), in private practice within the last five years. In two cases, the diagnosis was not made until the supervening glandular swelling and the exanthem made it self-evident. In one case, the correct diagnosis was made by the examining rhinologist, and confirmed by finding *Spirochaeta pallida* in the early seronegative stage, the ideal time for abortive treatment. The most important point in the early diagnosis of a hard chancre of the septum is the erosion or ulceration with indurated border on the septal surface, which bleeds easily but does not cause perforation. The discrete, painless submaxillary bubo is an important diagnostic point, as this does not occur in the commoner tertiary lesions within the nose. The differential diagnosis must exclude the various forms of late syphilis, particularly the circumscribed gumma of the septum with crater-shaped ulceration and perforation; tuberculosis, either in the form of the solitary tuberculous ulcer or an ulcerating lupus vulgaris, and epithelioma involving the septum. In rare instances, a rhinoscleroma may have to be ruled out.

#### CONTOUR OF NORMAL AND TUBERCULOUS CHESTS

S. A. Weisman, Minneapolis (*Journal A. M. A.*, July 23, 1927), summarizes the results of his study of normal and tuberculous chests as follows: The flat chest appears to be the healthy chest. The round or deep chest is probably an infantile undeveloped chest. The round chest is probably more prone to tuberculosis. The vital capacity of the flat chest is more than 50 percent greater than that of the round tuberculous chest. Early childhood diseases may play an important role in hindering the proper development of the chest. Good environments, such as fresh air, sunshine, proper food and special forms of gymnastics, can help to increase the vital capacity. To quote Hutchinson, "a month of tree climbing may be worth a gallon of tuberculin."



## GRAVES' DISEASE

The three actors which J. Marion Read, San Francisco (*Journal A. M. A.*, May 28, 1927), considers to be largely responsible for retarding progress along the path which will ultimately end in revelation of the etiology and pathogenesis of Graves' disease, are, first, the premature acceptance of theories and their accompanying implications that its pathogenesis is known; second, a misconception of the part played by iodine in the normal and pathologic physiology of the thyroid; third, an uncritical acquiescence to the post hoc, ergo propter hoc argument in evaluating surgical and nonsurgical treatment. The first factor probably will continue to operate and still longer postpone discovery of the cause of Graves' disease. Four of the most frequently used synonyms—hyperthyroidism, dysthyroidism, exophthalmic goiter and hyperplastic toxic goiter—are discussed here because each of them implies a knowledge of etiology which does not exist, yet the implication imparts a feeling of confidence as unwarranted as the term itself. Although the work of Marine and others has established the relationship existing between iodine and the histologic structure of the thyroid, knowledge of the manner in which iodine acts in reducing the toxic manifestations of thyroid disease is still lacking. But it was not ignorance of its mode of operation which prevented iodine from becoming established as a valuable medicament in this disease. The reason is found in the fact that iodine did not fit into the theories of etiology and pathologic physiology then in vogue. In fact, according to these theories, iodine was thought to be contraindicated. Nor is it probable that the exhibition of iodine in Graves' disease would have become as widespread as it now is but for the work of Kendall, Marine and others which permitted the elaboration of theories in which iodine played a necessary role. The third potent factor in discouraging further inquiry into the etiology of Graves' disease is the seeming success which has attended its treatment by the roentgen ray and surgery. Practice proves theory right and theory vindicates practice. The theoretical considerations have been largely abandoned, however, in the case of surgery for it has developed that the degree to which "hyperthyroidism" is checked bears little relation to the amount of tissue removed. The frequency of recurrence led the surgeons to advise the removal of more thyroid tissue. Each year the word has gone forth to remove more and still more tissue until it was considered that the ideal had been reached in a subtotal thyroidectomy. But now we learn that a subtotal thyroidectomy is inadequate and is being replaced by an attempt to remove all of the gland which can safely be removed, afterward placing reliance on replacement therapy for cure. Here is an instance wherein practice based on theory ultimately shows the theory to be wrong. The only sound interpretation which can be placed on the results of thyroidectomy is that, when the organ becomes diseased beyond possibility of recovering its normal function, amputation becomes advisable. It is significant that these therapeutic results have not afforded a clue to the cause of Graves' disease. This in itself is enough to raise the suspicion that none of the current theories supporting present therapy will ultimately prove true. One cannot disparage the utility of theories in arriving at the ultimate truth, but care should be exercised lest they impede progress and obscure truth.

## BOOK REVIEWS

DISEASES OF THE DIGESTIVE ORGANS. By Charles D. Aaron, Sc.D., M.D., F.A.C.P., Professor of Gastro-Enterology and Dietetics in the Detroit College of Medicine and Surgery, etc. Fourth Edition, Thoroughly Revised. Illustrated with 174 Engravings, Seventy Roentgenograms and Thirteen Colored Plates. Cloth. Price \$11.00. Lea & Febiger, Philadelphia, 1927.

This is the fourth edition of a well known and very much favored treatise on diseases of the digestive organs. Modern scientific research has done much to advance the theory and practice in the knowledge of diseases and treatment of diseases of the digestive organs, and the author has recognized this by revising and to a large extent rewriting much of the present volume in order that it will be thoroughly up to date. The chapters on disease of the liver, bile ducts and gall bladder have been revised entirely in the light of recently ascertained facts. As in former editions, the author has followed the physiologic path of diseases of the digestive tract, beginning with diseases of the mouth and taking up in succession the pharynx, esophagus, stomach, liver, gall bladder, bile, bile ducts, pancreas, small intestines, vermiform appendix, cecum, colon, sigmoid flexure, rectum and anus. The author very justly criticises the tendency on the part of some authors to consider some of these diseases as definite entities, and he believes that there is an intimate relationship between gastroenterology and the other branches of internal medicine which should not be lost sight of in considering the subject. Much attention is devoted to chemical and microscopical examination of tissues and fluids, and the use of roentgenography, a whole chapter being devoted to the latter. The work is very comprehensive and, withal, a most satisfactory discussion of the subject matter. It will be found useful to the surgeon and internist, as well as to those who are interested particularly in gastroenterology. It should meet with the favorable consideration of former editions.

SHOULD WE BE VACCINATED? By Edward J. Stern, Instructor of Sociology, Columbia University. Cloth. Price \$1.50. Harper & Brothers, Publishers, New York and London, 1927.

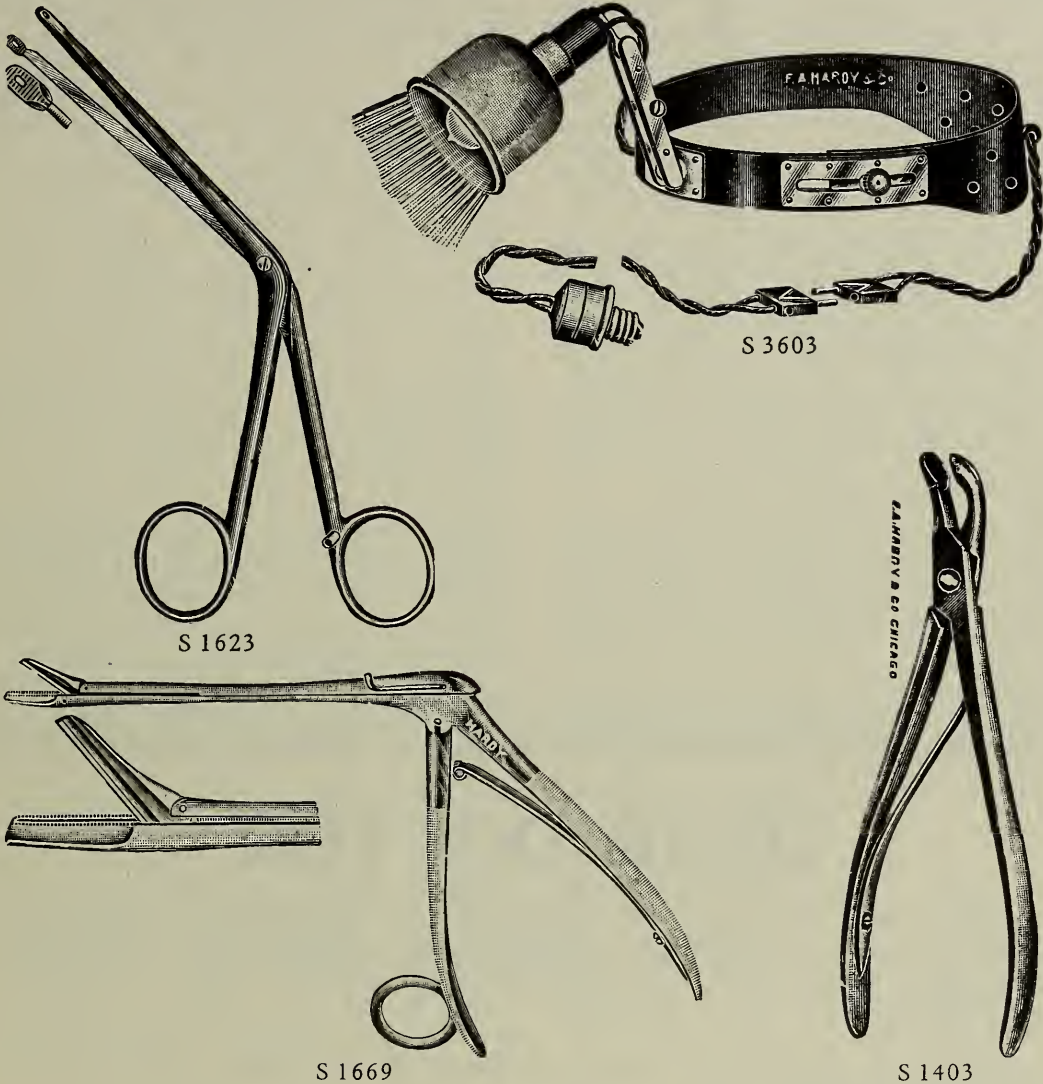
This book contains an analytical consideration of the arguments for and against vaccination. It ought to serve a very useful purpose and probably will if read by people who are not fanatically biased in their opinions. The author's discussion of the subject is thoroughly impartial, but the facts force him to the conclusion that the anti-vaccination propaganda is largely built upon inconsistencies, illogical conclusions and oftentimes deliberate misrepresentation and falsehood. On the other hand, it is shown that vaccination has not won its place in the minds of intelligent medical men and public health workers without development from a relatively crude but effective preventive measure to one that now possesses a refinement of accepted scientific procedure. In no sense should the book be considered as propaganda, for, as the publishers well say, it is a critical, historical study of the sociological and psychological factors which have provoked persistent opposition to vaccination, and it is written by a sociologist interested in the problems of social change.

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1926. With comments that have appeared in THE JOURNAL. Cloth. Price, \$1.00. Pp. 73. Chicago: American Medical Association, 1927.

Those who are interested in the work of the Council on Pharmacy and Chemistry, and this includes all who have to do with the therapeutic use of drugs, look forward each year to the volume which gives the reasons for the Council's rejection of the preparations found unacceptable for inclusion in New and Nonofficial Remedies. These reasons are given in the Annual Reprint of the Reports of Council on Pharmacy and Chemistry; in addition the book gives the reasons for the omission of certain preparations from New and Nonofficial Remedies during the year, and contains several special reports of

(Continued on Advertising Page xx)

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# BOOK REVIEWS

(Continued from Page 318)

a general nature authorized by the Council for publication.

Reports are given on the following articles found not acceptable for New and Nonofficial Remedies: Allonal, Animasa, three benzyl benzoate preparations, Ceanothyn, Cresog, Firma Chloro, Idozan, Malt Nutrine, Murarsenide, Naftalan, Neo-Reargon, Nontox, Numoquin, Oleosolution, "Pabst Extract—The 'Best' Tonic," Phenoseptine Cones and Phenoseptine Powder, Pollen Antigen Spring Type-Lederle, Rad-X-Solution A and Rad-X-Solution B, Robes' Anti-rheumatic Injection, Sodium Methylarsenate (De Marsico), Ster-Alco, Sulcitacium, Tetradol, Thymo-Borine, Toxivi, Toxok, and Triophos. Besides these there are reports on a number of articles that have been omitted from New and Nonofficial Remedies.

The volume also contains the following special reports of current interest to physicians: a report on the status of bacillus acidophilus and bacillus bulgaricus therapy, on the basis of which the N. N. R. articles on Lactic Acid-Producing Organisms has been revised and rewritten; a report dealing with the esteem in which antistreptococcus serum is now held by leading surgeons, gynecologists and obstetricians, prepared by Dr. Emil Novak on the basis of the answers to a questionnaire sent to representative members of these groups; and a preliminary report on the status of the new drug, Ephedrine.

NEW AND NONOFFICIAL REMEDIES, 1927, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1927. Cloth. Price, postpaid, \$1.50. Pp. 473 XLVII. Chicago. American Medical Association.

The appearance of the annual edition of New and Nonofficial Remedies is looked upon as an event among

all those interested in drugs and their therapeutic use. The text is so carefully scrutinized and revised each year by the various members of the Council on Pharmacy and Chemistry that each issue is essentially a new book, a safe guide to the frontier that lies between the official drugs and the latest preparations launched by the pharmaceutical manufacturers.

The mechanism of the book is excellent: each preparation is classified, and each classification is preceded by a general and critical discussion of the group by one who is an authority on the subject; there is an exhaustive index not only to the contents of the book, but also, separately, to the literature concerning the host of preparations that the Council has found unacceptable for inclusion. A glance at the book shows that the most important single revision this year is that of the general article on Lactic Acid-Producing Organisms, which has been radically revised and rewritten to show the present status of therapy in this field. Further perusal shows that many preparations have been omitted. The preface explains that many of these have been omitted because the manufacturers or distributors have not presented evidence to demonstrate their continued eligibility. Some have been omitted because they have become official articles by inclusion in the tenth edition of the U. S. Pharmacopeia, such articles when marketed under the Pharmacopeial name or synonym, and without special claims, do not require description in New and Nonofficial Remedies.

Among the preparations newly admitted to the book are: Isacen, a product related to phenolphthalein; Ipral, a barbitol hypnotic; a cod liver oil concentrate having a definite vitamin A and vitamin B potency; and three erysipelas streptococcus and antitoxin preparations.

New and Nonofficial Remedies is indispensable to any physician who prescribes drugs. It contains information about medical products which cannot be found in any other publication.

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### ORIGINAL ARTICLES

#### THE DIAGNOSIS AND TREATMENT OF BRAIN TUMORS

WALTER E. DANDY, M.D.\*  
BALTIMORE

All lesions become more frequent as our acquaintance with them grows. If we hark back but a very few years, appendicitis was unknown, then very rare, and finally a very common ailment. The same story is true of any number of lesions. The great educator of true perspective is necropsy and operation. Brain tumors are passing through the rare stage because neither necropsy material nor operative inspections have checked mistaken diagnoses. But in a few clinics intensive studies have shown not only that brain tumors are among the most frequent tumors of the body, but during the first six decades, particularly from the second to the fifth decades, tumors are among the most common afflictions of the central nervous system.

The results of the long struggle in the solution of appendicitis should teach us much about the fundamental treatment of brain tumors, and prevent many of the sad chapters in its story when told in later years. Two accomplishments have transformed a prohibitive mortality in the treatment of appendicitis into one which should be practically nil: first and foremost, an early and accurate diagnosis, and second, an early and efficient operative procedure which eradicates the cause.

In the treatment of brain tumors, the same two factors are all-important, and in addition there is the third great factor—*localization* of the tumor. Although the diagnosis and localization of appendicitis are nearly synonymous, the same is far from true in brain tumors. In fact, the localization of brain tumors has been the most difficult phase of this complex neurological problem.

It is doubtless known to you all that tumors as large as one's fist are still compatible with life and without giving the slightest evidence of their situation. For many years it has been possible to know that a patient was afflicted with a tumor, but we have not been able to tell where it was located. With such inadequate information, it is clear that operative results must be very poor. Without ac-

curate information, I should venture the assertion that in the hands of the very best operators, less than one-third of all explorations for brain tumors would actually disclose the tumor at first operation. In fact, so discouraging have been explorations for tumors of the brain, that, except when the location of the tumor seems clear, the palliative decompressive operation has become more or less routine. Obviously, such treatment is most unsatisfactory. There is only one way to cure a patient with a brain tumor, and that is by a complete extirpation of the growth by operation. Decompressions have been justifiable only because the location of the tumor has been unknown. If the location of the tumor is known, any treatment which delays or is palliative, is no more justifiable than delay or palliation in appendicitis.

Although the rate of growth of brain tumors is variable, a fatal outcome is almost inevitable. But we have many warnings of this impending calamity. Tumors cause headache, destroy vision, produce paralyses, convulsions, speech and mental and other disturbances, and most of these changes are progressive. The great hope for patients afflicted with brain tumors, lies in the earliest possible diagnosis. To do this, it is incumbent upon us to suspect a tumor when any symptom or sign referable to the central nervous system makes its appearance. Fortunately, it is now possible by the use of cerebral pneumography—i.e., roentgenography of the brain after the injection of air into its ventricles or subarachnoid spaces—to diagnose and also to localize practically all brain tumors which cause pressure, and in the early stage of the tumor's growth. This being possible, the problem of handling brain tumors is greatly simplified.

The treatment of tumors is now reduced to a single simple formula: complete extirpation when the nature and location of the growth make this possible; and when impossible of removal, then and only then to produce the maximum decompression for palliation. Unfortunately, some brain tumors, by virtue of their infiltrating character, do not permit extirpation. In other instances, removal is precluded because of the invasion of the brain-stem, speech centers, or other vital parts of the brain. There are, however, many nonencapsulated growths in silent areas of

\*Presented before Ft. Wayne Medical Society.



the brain which, if detected early, can be completely removed. The so-called silent areas of the brain were formerly the greatest handicaps to cerebral surgery because they prevented diagnosis or localization of the growths owing to the absence of signs or symptoms. Formerly, it was necessary to perform palliative operations until the tumor grew beyond the confines of the silent brain and produced paralysis or other focal destructions of the contiguous brain with recognizable functions. Now these silent areas are the greatest assets for the success of brain surgery; for, the localization now being possible in another way, extirpation of the growth can be done with contiguous silent areas of the brain, when necessary, and still leave the patient without noticeable defects.

I have said that practically all brain tumors should now be localized and at once. Brain tumors give rise to two types of signs and symptoms: (1) localizing symptoms and (2) general pressure symptoms. If the former are present, the localization is automatically made. Their consideration need not detain us. But the overwhelming proportion of brain tumors give rise to so-called pressure symptoms, and it is to the consideration of this difficult problem of localization that I wish particularly to call your attention. As you know, the craniovertebral chamber is a closed and fixed space and its contents—blood, cerebrospinal fluid and brain tissue—are almost totally incompressible. For this reason, a new growth is tolerated only by a compromise with these intracranial contents, and this compromise gives the warning signs: headache, nausea and vomiting, choked disc, etc.

Probably all brain tumors which produce intracranial pressure, produce (as an expression of this compromise) changes in the size, shape or position of the ventricles and subarachnoid spaces of the brain. If the fluid from these spaces is removed and air is substituted in its place, these changes in size, shape and position will be accurately registered in roentgenograms of the head. It is, therefore, clear that if these alterations are known, the location of the cause which produces them (the tumor) can be deduced. I will now show you a series of lantern slides which will explain the localizations of brain tumors from every part of the brain. In many instances the localizations have been so precise as to permit transcortical incisions of great depth to find the tumor at operation, and often successfully to remove tumors which otherwise could never be found except at necropsy.

I should not wish to leave you with the impression that it is a simple and harmless procedure. Unfortunately, it is the reverse. It is both complicated and dangerous. The interpretation of the air shadows is difficult and is all dependent on the intimate knowledge of intracranial anatomy and physiology. Its danger is shown by the fact that I have had three deaths in my first 100 injections.

However, in over 400 since then, there has been none. This is owing to the fact that I have learned how to eliminate the dangers. Air is an irritant. When the ventricular channels are blocked, its absorption is prevented; a sero-sanguinous exudate results from its irritation, and this produces a marked accentuation of pressure symptoms. Many patients are so ill that this additional pressure could not be tolerated. To prevent this complication, the air should be removed as soon as possible after the skiagrams are completed. If the quantity of air injected is large (30. c.c. or more) either the original ventricular fluid or saline solution may be replaced. In safe hands, the procedure is now without great danger. It seems inadvisable, at least at the present time, that a risk so great as the use of air requires, should be assumed except by a competent neurological surgeon.

### STAINING TUBERCLE BACILLI\*

HENRY STEMPE, M.D.

BOEHNE TUBERCULOSIS HOSPITAL  
EVANSVILLE

It was the ingenious French author, Villemin, who to the surprise of the medical world, in 1865, announced his opinion that the cause of tuberculosis was a germ. Only a few followed his idea. With the foundation of bacteriology, as laid by Pasteur, the discovery of the tubercle bacillus was forecasted. As Dr. Koch later said, "The discovery of Villemin that tuberculosis can be conveyed to animals gave the basis of his findings." Baumgarten, in 1870, was probably the first to see the bacillus unstained, but he was without means to identify it. Klebs likewise, in 1877, actually transferred to animals cultures in which was to be found a virus which he termed "monas tuberculosis" or that which produces tuberculosis in animals. It was Dr. Robert Koch who said, in 1882, that "his happy day when he first saw the bacilli was on March 24th." With the aid of Ehrlich, who first introduced the aniline dyes in medicine for the purpose of staining, he was able to show the tubercle bacilli clearly. Koch, himself, also introduced the method of fixing and drying sputum by passing through a flame.

Koch describes his method or process of staining the T.B. bacilli as follows:

1. Stain consists of saturated alcoholic solution of methylene-blue..... 1 c.c.  
Aqua destillata.....200 c.c.
2. Add caustic potash (10 p.c. solution)..... 0.2 c.c.

The preparation remains in the stain for twenty-four hours. By warming the solution to 40° C the time can be shortened to one hour.

3. The object is then poured over with a concentrated watery solution of Vesuvium which must be filtered each time before using, then

\*Read before a meeting of the Vanderburgh County Medical Society.

wash in distilled water for two minutes. The tubercle bacilli retain the blue color of the methylene-blue while all the other tissues take on the brown color of Vesuvium.

This method was practiced all over the world for about ten years, then Ziehl-Neelsen's Carbol-Fuchsin instead of Koch's Methylene-Blue was known and it has the idea that substances that are themselves soluble in lipoids, such as phenol, are better able to penetrate the waxy tubercle-bacillus than free acids and alkalies. We know from the chemistry of the tubercle bacillus that it consists of about 50 p.c. of fat, lipine (which is the reason for its acid-fast property). Hence, while the Phenol-Stain is soluble and is able to penetrate the body of the bacillus, acids are not and this we call acid-fast.

This stain forms a standard stain for tubercle bacilli all over the world at the present day. It is best applied as a cold stain for twenty-four hours with a separate decolorizer and a separate contrast stain. It gives satisfactory pictures and is reliable for the diagnosis.

Later Gabbet's Solution was introduced and was widely accepted. This is a combination of a decolorizer and a contrast stain in one solution. This solution is very convenient and this alone may be the reason for its extensive use. However, concerning the reliability for a diagnosis, the use of this solution is rather a disadvantageous one, not to say a failure. I emphasize this fact for the reason that I have seen many physicians and technicians who know and practice only Gabbet's Method for the finding of tubercle bacilli. But this method is not reliable in all cases. We have better methods though, of course, they take more time and probably more work, but we obtain more positive results. As Todd in his excellent book on "Clinical Diagnosis," (on page 77) rightly states: "Tubercle bacilli can often be found in very poorly prepared slides, but for dependable results we have to practice the best methods. The person who is content with an imperfect preparation just because it is good enough for the diagnosis will succeed only in the most obvious cases." Hence, I have to state: We can find tubercle bacilli "even" with Gabbet's Solution but not in all cases. Gabbet's Solution in many cases decolorizes the tubercle bacilli by the strong sulphuric acid (25 p.c.) as many technicians and myself have proven. Furthermore, this decolorization is masked very seriously by the blue of the stain, and the whole object turns a reddish-violet which is hard to distinguish from the red of the bacilli.

The same is true about Ziehl-Neelsen's "Steaming" Method. This method also bears many dangers for the diagnosis, because a too great heat (which is very hard to avoid over an open flame) interferes greatly with the staining of the tubercle bacilli by destroying the waxy substance of the bacilli upon which the acid-fast property depends.

To make a diagnosis in a patient suspected of tuberculosis where we have the patient under observation for several weeks or even a few days, there is no reason, whatsoever, to save twenty-four hours in time, or a little more work, on the expense for the reliability of the diagnosis. It is, therefore, the duty of every serious technician in case the findings are negative with Gabbet's method to look for other methods which are more reliable. I have found it true in many cases where I could not find the tubercle bacilli with Gabbet's method that I could see them very clearly by means of others. It is more important to find the bacilli in suspected, incipient and doubtful cases than in obvious and advanced cases. Hence, every technician, when asked by the clinician whether "positive" or "negative" should do his best and not try to save time or work.

It is still true today as it was forty-five years ago as Dr. Koch stated: "The object should remain in the stain for twenty-four hours." This is still the only reliable method. But better results will be obtained by putting the object with the stain in the incubator for twenty-four hours at 37° C and then place in a refrigerator for one and one-half hours. The latter procedure promotes the precipitation by cold. The time can be shortened safely by warming the stain 40° C in a test tube and putting the object in the stain in the incubator for one hour at 40° C.

For the first stain we use Ziehl-Neelsen's Carbol-Fuchsin. More recently a modification of this stain was recommended by Czapslewski. This stain is far superior to the widely known Ziehl-Neelsen's and differs from the latter by its contents of Glycerol. It consists of:

Basic-Fuchsin .....	1.0 gm.
Carbol-Crystals .....	5.0 gm.
Glycerol .....	50.0 c.c.
Water .....	50.0 c.c.

After this staining, we use a decolorizer to clear the object thoroughly before we apply a new stain. As a decolorizer we use:

- 5 p.c. Nitric Acid or
- 10 p.c. Sulphuric Acid

The best results, however, will be obtained with the following:

Concentrated Hydrochloric Acid	3.0 c.c.
Alcohol (70 p.c.) .....	97.0 c.c.

We decolorize the object until it is absolutely colorless, then wash it well in water and decolorize it again with 95 p.c. methyl alcohol.

As contrast stain we use only such stains as do not obscure the red of the bacilli. We may use:

1. Loeffler's Methylene-Blue. (I find that this gives a much better picture if it is diluted 1=100. The picture is brighter and we can see the bacilli easier.)
2. Brilliant Green. (In the following solution.)



- (a) Saturated Alcoholic Solution of Brilliant Green.....1 c.c.
- (b) 1 : 10,000 Aqueous Solution of Sod. Hydroxide .....500 c.c.

3. The best pictures will be obtained with the following contrast stain:

- (a) Saturated Aqueous Solution of Picric Acid.
- (b) Methyl-Alcohol (95 p.c.) equal parts.

After decolorizing and washing in water, run over the object the latter stain for fifteen seconds, wash in water, dry, and mount.

By this method we get a most excellent clear field where we can see the tubercle bacilli easily and distinctively, the deep red color of the bacilli being easily discernable on a golden-yellow background.

On one fact I want to call the attention of the technicians, that we forget and neglect altogether, trying the Gram's Method of staining the tubercle bacilli since we know that they are Gram Positive.

It is well worth trying in doubtful cases as it may reveal the tubercle bacilli in many cases, where the result was negative by the usual methods.

A method of staining the tubercle bacilli in feces and urine as a safeguard against confusion of the "Smegma Bacillus" and other acid-fast bacteria with the true tubercle bacillus is the Pappenheim's solution. This consists of:

Rosolic Acid .....	1.0 gm.
Absolut Alcohol .....	100.0 c.c.
Methylene-Blue .....	1.0 gm.
Glycerol .....	20.0 c.c.

After staining with Carbol-Fuchsin in the usual manner, apply this solution as a decolorizer and counterstain. This solution decolorizes all other acid-fast bacteria but not the true tubercle bacilli even when soaked over night.

In cases of suspected tuberculosis where we cannot show the tubercle bacilli we should try the *Concentration Method*. The principle involved in the use of the Concentration Method, whether in sputum, urine, or feces, is the destruction of practically all of the secondary bacteria, dissolving of nearly all other tissues, and the concentration of the number of the tubercle bacilli so that they can be more readily collected for examination. As I have mentioned, the tubercle bacilli, because of its contents of so large an amount of fat, cannot be affected, in a certain degree, either by acids or alkalis. We can, therefore, say: Tubercle bacilli are not only "acid-fast" but they are also "alkali-fast" in certain solutions. Hence, we are able to destroy, dissolve, or digest all other bacteria and tissues in the specimen while the tubercle bacilli remain unaffected.

This property of the tubercle bacilli permits the application of chemicals to concentrate the tubercle bacilli for examination. From many methods recommended for this purpose, I selected the

simplest method for application and which is very reliable.

#### 1. *Concentration Method for Sputum.*

The procedure is as follows:

About one ounce of sputum is mixed with equal parts of a 4 p.c. Sod. Hydroxide Solution. Shake well for five minutes, and incubate for one-half hour at 37° C.

The time for incubation depends on the consistency of the sputum. If the sputum is tenacious, a longer time and more Sod. Hydroxide must be used for digestion. After complete homogenization, the mixture is centrifuged at high speed for ten minutes, the supernatant fluid decanted, and to the sediment two to three drops of normal Hydrochloric Acid is added to neutralize the sediment. This point can be determined when the sediment, after the addition of Hydrochloric Acid, changes from transparent to white or opaque. The mixture is then washed well in distilled water and centrifuged again at high speed for five minutes. A thin film is now made of this sediment on a slide. Allow it to dry in the air, fix over a flame and stain in the usual manner.

#### 2. *Concentration Method for Urine.*

A twenty-fours' specimen is used.

If no acid is in reaction, the specimen must be acidified with a few drops of 30 p.c. Acetic Acid. To every 1,000 c.c. of urine 2 c.c. of 5 p.c. Tannic Acid Solution is added. The specimen is well shaken and placed in an ice box for twenty-four hours. During this time, a heavy precipitate is formed which settles. The supernatant fluid is now decanted and the sediment is centrifuged for ten minutes at high speed and again decanted. The sediment is treated with 1 c.c. of normal Sod. Hydroxide Solution which completely dissolves it. After warming for thirty minutes at 37° C it is diluted with three volumes of sterilized water and is again centrifuged, the supernatant fluid decanted and to the final sediment a drop of 30 p.c. Acetic Acid is now added to prevent the sediment from washing off. Make a thin film, stain with Carbol-Fuchsin and Pappenheim's Solution in the usual manner.

#### 3. *Concentration Method for Feces.*

Morning stools are collected in a wide-mouthed jar and diluted with two volumes of water. This is stirred and filtered through gauze to remove the coarse particles. The liquid stool is then saturated with Sod. Chloride Crystals and allowed to stand at room temperature for six hours. At the end of this time, the bacteria will float upon the surface and the scum can be collected with a sterile spoon and placed in a wide-mouthed bottle. Two volumes of normal Sod. Hydroxide are added to the scum. The mixture is shaken well and incubated from one to two hours at 38° C.

The specimen is centrifuged, supernatant fluid decanted, and to the sediment is added three to four drops of normal Hydrochloric Acid. Make thin smears, stain with Carbol-Fuchsin and proceed to decolorize and counterstain with Pappenheim's Solution.

As to the value of each method of staining to find the tubercle bacilli, I found that we can reveal the tubercle bacilli with Ziehl-Neelsen's Carbol-Fuchsin in about fifty per cent more cases than we could with Koch's method, and with my methods we succeed in showing the tubercle bacilli in at least thirty per cent more cases than we can with Gabbet's and Ziehl-Neelsen's "Steaming" Methods.

A very important procedure for the diagnosis and one which is mostly neglected, is the collection of the sputum which is to be examined.

1. More than one expectoration is often necessary for the examination.
2. To avoid errors in the diagnosis and to eliminate the possibility of outside contamination of the sputum, wide-mouthed bottles with glass stoppers should be used by the patients directly and so sent to the laboratory instead of putting in paper boxes. The latter are not tight, liable to leak or to become dry with the consequent danger of handling and outside contamination.

The bottle should first be treated with a strong solution of Nitric Acid or Sulphuric Acid, 25 p.c., rinsing with distilled water, and drying. The stoppers should get a thin coat of glycerin in order to make them absolutely tight and easy to uncover.

Another very important point which is liable to cause errors in the diagnosis, is the presence of "saliva" in the sputum. As it was shown in the Trudeau's laboratories, "saliva" with its digestive ferment "ptyalin" weakens the acid-fastness of the tubercle bacilli and gives negative results.

The patient should be instructed to collect only the morning expectorations which have been "coughed up" from the *lungs*. Nasal mucus should be rejected as it is useless for the examination. The following table is used in our hospital to instruct the patients in the collection and delivering of the sputum to the laboratory:

The following points are of *greatest importance* in the collection and delivering of sputum to the laboratory:

1. The sputum is to be spit in the bottle *directly*.
2. Put in the bottle *only* what you have *coughed up* from the lungs.
3. Do *not* spit *saliva* into the bottle.
4. Do *not* spit into the bottle *nasal* mucus.
5. At *least* three expectorations are necessary for examination.
6. Put into the bottle *only* the *morning* expectoration.
7. Do *not* spill *water* into the bottle.

8. Do *not* spit into the bottle any *food stuff* or *tobacco*.
9. Cover the bottle with the glass stopper *immediately* after each expectoration.
10. Do *not* soil the *outside* of the bottle.

Unless the above orders are kept *strictly* the sputum is *useless* for examination.

If the specimen is not to be examined immediately, it should be stored in an ice box to prevent further contamination and fermentation.

In suspected cases of tuberculosis, when little or no sputum can be secured for examination, the administration of 5 to 10 gr. of Sodium Iodide after each meal for one to three days may increase the excretion considerably and also the chance of finding the bacillus.

If sputum is to be obtained from children who usually swallow it or in some cases of adults who fail to co-operate, then either the feces should be collected or the specimen can be obtained by swabbing the pharynx or larynx.

The selection of the particles of the sputum to be examined is also of great importance for the diagnosis. Only particles of purulent and caseous sputum should be selected and only a very thin film gives the best chances for good results.

The "number" of tubercle bacilli found in the sputum varies considerably but it has no bearing positively in the severity of the disease. Large numbers have been found in cases with small involvement, while on the other hand, cases with large involvement may reveal only a few bacilli.

We can also observe, that the "size" of the bacilli varies greatly and I have found that the "smaller type" or the young bacilli is to be more often seen in far advanced cases and it may have some significance in the diagnosis. It is probably a sign of the rapidity of the proliferation of the bacilli that we seen them in the earlier stages of involution and indicates a greater activity.

The reaction of the sputum has some significance in the diagnosis. Generally the sputum is neutral or slightly alkaline. If the sputum is of an acid reaction, it indicates that it came from cavern due to the fatty acids of decomposition.

Finally, I would recommend a very useful stain to show the mixed infection with Staphylo Streptococci, which is so very important in our diagnosis for cavity formation, and the cause of high temperature. It is a double stain which shows the cocci "red" and the cells "blue." It is to be made on special slides. This stain consists of:

Pyronin .....	1.0 gm.
Aqua Dest. ....	100.0 c.c.
Methyl-Green .....	2.0 gm.
Aqua Dest. ....	100.0 c.c.

After dissolving each stain separately, mix equal parts.

#### SUMMARY

The clinician expects, according to his findings of the physical examinations, the technician to



sustain his diagnosis by finding the tubercle bacilli in the laboratory. Every serious technician will feel that negative findings to be his fault, due to lack of skill, or to some fallacy in our present knowledge of technique. (Todd made forty-four preparations on one patient before he found the bacilli.) This shows us technicians that a great task is before us and that we have to watch, look, and work hard in order to accomplish the work before us.

As Dr. Koch truly said: "The gold was lying on the surface when he began, but later was to be mined only with hard labor. Much has been accomplished, but much remains to be done by concerned efforts in many directions to uncover the deeper mysteries of tuberculosis."

### CORONARY OCCLUSION—REPORT OF CASES WITH RECOVERY\*

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It is only within recent years that coronary occlusion with the resulting infarction of the myocardium has more generally assumed the place of a definite clinical entity, diagnosable at the bedside and going on, in a considerable proportion of cases, to recovery.

The condition has been known at the postmortem table for some time, but it was first in 1896 that George Dock claimed that he was able to recognize it on the living patient. Then followed the publications of Osler in 1910, James B. Herrick in 1912, and Sir Clifford Allbutt in 1915, all emphasizing the clinical aspects of the disease and their correlation with the pathological findings. To Dock and Herrick belongs most of the credit for the recognition of that form of the disease that recovers from the attack. The more recent excellent contributions to the subject, too numerous to mention, have combined to give us a much clearer conception of the disease.

The essential lesion of coronary thrombosis is a sclerosis of the coronary arteries with narrowing of the lumen and roughening of the intima. On this roughened area of endarteritis a thrombous forms, which grows until it occludes the vessel. A similar result rarely occurs from embolism of a coronary artery. The source of such embolus is usually a vegetation on one of the left heart valves, a mural thrombus, or a thrombosis somewhere in the pulmonary circulation. The anterior descending branch of the left coronary is the one usually involved, but the right coronary may be affected. The occlusion of the vessel produces an area of ischaemia in that part of the myocardium supplied by it, followed by necrosis or infarction. This infarct may be replaced by fibrous tissue with the formation of a firm scar, or if too extensive, may give way with the formation of an

aneurism or may rupture with the occurrence of sudden death.

As to the etiology of the condition little is known, there being no constant findings in the cases analyzed. It is probably identical with that of arteriosclerosis in general. It occurs most commonly in men, with rare exceptions past forty, reaching its greatest incidence in the decade between fifty and sixty and then gradually falling. The patient is usually strong physically—of the muscular or robust type. There may be a family history of vascular disease of some kind. Infections play an insignificant role. In a small number a history of diabetes, syphilis, gout, or chronic lead poisoning may be obtained. Preceding endocarditis is uncommon. Even hypertension is not a constant finding. Sclerosis of the peripheral arteries may or may not be present. Many patients give a history of preceding attacks of precordial distress ranging from very slight transitory discomfort, very often interpreted by the patient and the physician as indigestion, to definite attacks of angina. The various forms of preceding distress have in common abrupt onset, short duration, association with exertion, emotion, or digestive activity—especially effort combined with a full stomach—and location beneath the upper portion of the sternum with or without radiation to the shoulder and arm—ordinarily the left. It may be described as a feeling of constriction, or pressure, or fullness, or tightness, or pain in the center of the upper portion of the sternum. In a smaller group the discomfort is localized in the epigastrium and relief may even be experienced on raising a little gas from the stomach. A very considerable group of patients have experienced no preceding distress or perhaps only a little tightness in the chest on hurrying. There usually has been no evidence of previous cardiac insufficiency. Such, then, are the symptoms of the pre-existing coronary sclerosis.

Given such a patient as the above, the symptoms indicating the occurrence of a coronary occlusion are somewhat as follows: After some slight effort or even while lying perfectly quiet in bed he is suddenly seized with a severe agonizing pain in the center of his chest, with or without the characteristic radiation to the shoulders and arms. The pain is variously described by the patient as crushing, gripping, stifling, or clutching. He knows immediately that the pain is different from any pain of his past experience. It is deep-seated and located beneath the upper portion of the sternum or at times appears to be entirely below the diaphragm. The patient becomes prostrated and appears to be in a state of collapse or shock. The face shows distress, anguish, apprehension. He becomes pale or ashen gray in appearance and a cold sweat breaks out on his skin. Cyanosis is not common. Occasionally the skin shows a red flushing. The pain does not let up in the course of minutes as in an anginal attack but

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lasts for hours or even days and is not relieved by nitrites. Nausea and vomiting may occur, resembling an attack of acute indigestion. Dyspnea is a prominent symptom in many cases, often, greatly out of proportion to the findings in the heart and lungs, but orthopnea is uncommon. The pulse becomes small and thready, the rate ranging from 90 to 120, with frequently an arrhythmia. There is evidence of weak cardiac action, the sounds over the precordium having a tic-tac quality, or seeming very distant, with occasionally the first sound entirely inaudible. The heart is moderately enlarged and there may be a gallop rhythm. In a small number of cases a pericardial friction rub develops during the first two or three days, and is then very diagnostic. During the course of the first several hours a marked fall in blood pressure occurs either suddenly or gradually, and its later curve offers a good prognostic sign. Moist rales occur commonly at the bases of the lungs. The liver may become engorged and tender and a slight icteric tint of the sclera appear as a result. There may be muscle spasm and tenderness in the upper abdomen. Evidences of embolism may occur but oedema of the extremities is not common. Within a few hours a leucocytosis of 15,000 to 20,000 develops and later a temperature of 100 to 101 generally occurs. The urine shows nothing characteristic but in quite a few cases a transitory glycosuria has been noted. Following recovery the patient is free from anginal attacks because of the lowered blood pressure.

The differential diagnosis of the condition is very important. First it must be differentiated from angina pectoris because the treatment and prognosis are entirely different in the two conditions and cervical sympathectomy is definitely contra-indicated in coronary occlusion. The increase in pulse rate, the fever, the leucocytosis, the failure of response of the pain to nitroglycerine, the marked fall in blood pressure, and the long duration of the pain in coronary occlusion would be sharply contrasted with the sudden pain of a few minutes' duration, brought on by effort and relieved by rest or nitroglycerine, with no increase in the heart rate, no fall in blood pressure—probably an increase—normal heart sounds on auscultation, no fever or leucocytosis in angina pectoris. Secondly the condition may closely simulate an acute surgical abdomen and even laparotomy performed for the relief of some supposedly intra-abdominal lesion. When one remembers that the excruciating pain may be in the upper abdomen, accompanied by muscle spasm and tenderness, with nausea and vomiting fever and a leucocytosis, with slight jaundice and symptoms of shock, the similarity to acute pancreatitis, ruptured peptic ulcer, or gallstone colic becomes apparent.

In the prognosis of coronary occlusion there are three groups of cases to be considered: First where death is sudden or instantaneous and may be even painless. In this group there is prob-

ably a large area of muscle involved. Second, where death occurs in the course of a few hours, days, or weeks. Even when all the symptoms have disappeared and the patient seems no longer in danger, death may occur suddenly. This is most apt to occur during the second week as a result of softening or rupture of the infarcted area. And third, the group described in this paper, where the patient hovers in a rather desperate condition for some time but gradually improves with a complete healing of the injury and complete recovery of the circulation, and the return of the patient to a limited amount of work for years. Due to the lowered blood pressure, many of these patients are free from attacks of anginal pain after their infarction. Of Christians' series of seventy cases at the Peter Bent Brigham hospital over a period of ten years, forty-five were fatal and twenty-five cases recovered from the attack. Of the fatal cases, twenty-eight were proven by autopsy. The average duration of life after the thrombosis in White's sixty-two cases at the Massachusetts General Hospital was two years.

Bearing in mind the pathological changes that have taken place in a section of the heart muscle, the essentials of treatment consist first in protecting the heart from all possible strain during the time required for healing of the infarct, and second, the relief of the excruciating pain. The patient must be kept at absolute rest in the reclining posture for at least six weeks. Good nursing, a limited diet, with careful attention to the bowels and avoidance of all physical and mental strain are essential. For the relief of pain large doses of morphine are required. Nitroglycerine has no effect and with the lowered blood pressure it is really contraindicated. As to direct cardiac therapy, there is some difference of opinion, the consensus, however, being that it is rarely necessary and is best avoided. Digitalis is used during the period of recovery only if signs of decompensation are evident. With signs of cardiac collapse, caffeine appears to be the most effective drug, and camphor or strychnine for general circulatory depression. After the period of bed rest, a very gradual return to physical effort is allowed.

CASE I. The first patient was a woman of fifty-four, who was first seen on January 11, 1926, at two o'clock in the afternoon. Her family stated that she had not been well for about a year. They did not know exactly what the trouble was. She had occasional attacks of pain in her chest and left arm and tired out very easily on exertion. She was told she had diabetes at one time but had never taken treatment for the condition. Recently she has been having dizzy headaches. Three weeks ago, following some exertion, she had a severe pain in her chest which radiated



down her left arm but lasted only a few minutes. Since then she has been working as usual with her household duties.

On this day, shortly after noon, she went to the basement to fire the furnace. She felt a sudden pain in her chest but was able to get upstairs. At the top of the stairs she fainted and was carried to her bed. The pain increased in intensity, became terrific and felt as if something were tearing beneath the upper part of the sternum but did not radiate. She was nauseated and vomited and felt as if she were dying. She was seen about an hour and a half later. She appeared to be in a state of collapse, with an ashen gray color, cold perspiration over her face, slight dyspnea but no orthopnea. The pulse was 120 per minute, regular, but of very small volume. The heart seemed somewhat enlarged and the sounds barely audible over the precordium. The blood pressure was 110 systolic, 90 diastolic. She vomited several times, could not speak loud enough to make herself understood, and in answer to questions as to her condition placed her hand over the center of her chest. About one hour later, while we were still sitting at her bedside, she gasped, her head retracted, respiration ceased, she became very cyanotic, no pulse could be felt at the wrist and heart sounds were inaudible. While we were preparing a hypodermic for stimulation, remarking to the family that it would probably be useless, the son threw himself upon the bed in a fit of excitement. As a result of the reflex stimulation her respiration returned, her pulse and heart sounds were again evident and the cyanosis disappeared. After four hours her condition had improved sufficiently that it seemed safe to remove her to the hospital.

The following morning her temperature had risen to 101 and reached 102 by afternoon. Her leucocytes were 14,000 and her urine showed the presence of sugar, a heavy trace of albumen with many hyaline and granular casts. Her pulse was fast, weak, and very irregular, she was cyanotic, with a Cheyne Stokes respiration. The second day the leucocytes numbered 21,000 and the fasting blood sugar was 246 mgm. per 100 c.c. of blood. She was irrational and tried to get out of bed. On the fourth day a pericardial friction rub was heard over the heart and moist rales in the bases of both lungs. The B.P. was systolic 108, diastolic 66. The next day the pericardial rub had gone and on the sixth day a pleural rub requiring strapping of the chest appeared. She remained in a critical condition for about two weeks, the heart sounds remaining very distant, the pulse rapid and small but regular, the B.P. low and the patient complaining of pain around the heart, weakness, vertigo, nausea and vomiting with periods of mental confusion. She then began to improve gradually. At the end of three weeks she was removed to the city hospital, where we lost direct observation of her. At our

last examination her pulse was 100, regular, and of fairly good quality. The heart sounds were distinct and the B.P. 112 over 70. At the city hospital she made an uneventful recovery and gradually returned to her former duties. At the present time she is in fairly good health, is doing most of her former housework, without attacks of angina as she formerly had.

CASE II. This patient was a man of sixty-five, of good physical development, weighing 240 pounds. He had always been unusually strong and robust until about two years ago, had worked hard and eaten very heavily. Two years ago he had an attack of pleurisy lasting about a week. Six months ago he had a series of boils lasting in all one month. His urine was not examined at that time. Beginning two years ago, after lifting a heavy load or following some unusual effort he would have a severe, sharp pain in his upper chest which ran through to the back in the upper interscapular region. Recently the pain was getting more severe, was occurring more frequently, and walking rapidly on level ground was sufficient to produce it. At such time he would have to sit down on a step or even the curb, when the pain would quickly leave. He had noticed recently that there seemed to be some connection between the attacks and an unusual heavy meal, and had consulted his doctor for indigestion.

On April 19th he ate an unusually heavy evening meal at eight o'clock and retired rather early. At two thirty in the morning of the 20th he was awakened from sleep with a severe clutching pain beneath the lower sternum and in the epigastrium, without any radiation. He vomited several times and perspired very freely and felt as if he were going to die. He thought it was indigestion but he had never experienced anything like it before. I saw him about two hours later. The pain persisted without intermission, was excruciating in character, and seemed to be chiefly in the epigastrium. He still vomited at intervals, was pale, his face anxious and covered with perspiration. There was some dyspnea, the pulse was very rapid, small, and easily compressible, the heart enlarged in all directions and the sounds very distant but regular. The B.P. was 118 systolic, 70 diastolic. The following morning his temperature reached 100.5, his leucocytes were 13,000, the heart sounds remained very distant and were of a tic-tac quality, the pulse was rapid, regular, and small. He felt very weak, the pain and vomiting had subsided, he was cyanotic with some dyspnea. His B.P. was systolic 96, diastolic 60, and there were moist rales at the bases of the lungs. His urine showed the presence of sugar and his fasting blood sugar was 310 mgm. per 100 c.c. His blood Wassermann was negative. A flat X-ray plate of his chest

taken at the bedside showed a general enlargement of the heart in all dimensions, some widening of the arch of the aorta, the right heart showing more enlargement than the left. There appeared to be a small amount of free fluid in the right chest.

The patient remained in a precarious condition for about ten days and then began to improve gradually. He remained in bed for five weeks and was then allowed to get up very gradually. His improvement to date has been steady and uninterrupted. When seen last week his pulse was 78, of good quality, equal in force and rhythm. The heart sounds were normal and the B.P. 130 over 80. He has been doing light work around the house, feels perfectly well, and can walk as far as he likes without any of his former pain.

CASE. III. The third patient was a woman of fifty-one, weighing 175 pounds, the mother of six healthy children. She had always been in good health, had worked hard and overindulged in food. For the past two years she had been having a dull aching beneath her sternum at intervals, but coming more frequently of late. She thought it was indigestion and had done nothing for it. She had noticed some shortness of breath on climbing stairs recently.

On the evening of August 26th she ate a heavy dinner, retired at about ten o'clock and at eleven she awoke with a burning sensation beneath her sternum, accompanied by a constriction in her chest and a feeling of nausea. She vomited several times, felt extremely weak, with a sense of impending death. She was seen about a half hour after the onset of the attack. She could not speak, her face was set, her eyes were glassy, with slight dyspnea but no cyanosis nor orthopnea. The pulse was rapid, regular, and very weak. The sounds over the precordium were distant. Her blood pressure was systolic 120, diastolic 80. The next day her temperature was 100, her pulse 104, her leucocytes 15,000, a faint trace of albumen in her urine and her blood Wassermann negative. She made a most satisfactory recovery for twelve days, the heart sounds improving, the pulse of good quality, and the B.P. reaching 144 over 90. On the twelfth day the substernal burning sensation with nausea and vomiting, severe vertigo, marked weakness, and a feeling of collapse suddenly returned. Her face again became set, her eyes glassy, with cyanosis but no dyspnea. Her pulse was weak and very irregular, heart sounds distant and irregular with a gallop rhythm. The B.P. dropped to 116 over 80. She improved somewhat but during the next five days she had a daily recurrence of the anginal attack, lasting for hours each time with marked pallor, or cyanosis, coldness of the extremities and free clammy perspiration. Her condition was extremely critical during these five days and was several times despaired of. After the seventeenth day, she

again began to improve. On the twenty-sixth day she complained of pain around the heart, her pulse was 118, her B.P. 100; she felt exhausted, her extremities were cold and she perspired freely. From that time on her convalescence was very gradual, with frequent sinking attacks and her chief complaints were of weakness, nausea, and vertigo. On the thirty-fifth day she was up on the back-rest. On the forty-fifth day she sat up in a chair for thirty minutes, gradually increasing the time allowed up until October 15th, the forty-ninth day of the disease, when she left the hospital. At this time her pulse was 84, and of good quality. Her heart sounds were clear and distinct, her B.P. 144 over 90. She was able to be up all day and to walk without pain or dyspnea.

#### SUMMARY

1. Coronary occlusion is not an uncommon disease in general medical practice and is either increasing in frequency or is gradually being more generally recognized.

2. The diagnosis is not difficult if one will keep in mind the picture of a typical case, and is based upon simple clinical methods available by all at the bedside.

3. That it is highly important from the standpoint of treatment that it be differentiated from the ordinary angina of effort, which quite often precedes it, from the various acute surgical condition of the upper abdomen, and from those questionable conditions diagnosed as "acute indigestion."

4. That the treatment consists of the most complete physical and mental rest possible for a period of about six weeks, with morphine for pain and to secure complete relaxation and digitalis when there is evidence of congestive failure.

5. That the prognosis is fairly good, many patients returning to a more or less restricted activity for years with often freedom from their former hypertension and angina.

NOTE: At the present time these three patients are still living and carrying on a moderate amount of activity, nineteen, sixteen and eleven months respectively, after their coronary closure.

#### DIVISION OF THE TENDO-ACHILLES IN FRACTURES OF LOWER LIMBS

GEORGE F. BEASELY, M.D.

LAFAYETTE

Many papers have appeared in the medical journals lately concerning the management of fractures of the leg, the trouble met in the reduction, and retaining the length of the limb during convalescence.

Since 1866 I have had the care of many cases in industrial and railway injuries. I have spent many anxious hours on the problem of reduction and retention, until I read a paper by the late Dr. J. P. Webster, of Englewood, Illinois, on "Division of the Tendo-Achilles in Pott's Fracture of



the Ankle." That, after the division, he had no trouble in the reduction, replacement and retention of the broken bones. It was the most concise, practical article I ever read.

No Pott's coming my way, I forgot it, until one July night I was called to the Monon Round House, where Casey, night hostler, was badly injured. I called the ambulance, the speed limit was ignored, was soon at the scene of the disaster, found Casey sitting on the floor propped against a box, a gloom on his face as he gazed on a mangled leg. "Sorry to call you but when they got me out I didn't know which way I was going. My left was all right going forward, but my right was turned around and starting back and I needed you to start right. But" (with a choking voice) "I guess it's a goner and me a cripple, with me a wife and four little boys."

When I meet a broken leg I examine first the top of the foot and note the character of the pulsation of the dorsalis pedis. If it's good and strong, I know I have a fighting chance to save the leg. This one was good and strong. "John," I said, "I think I can save your leg." The gloom was dissipated, with a whoop he exclaimed, "Bully for you, Doc." I called the hospital to have everything ready for a bad compound fracture of the leg. We were soon there and in the emergency room, John cleaned, and one-fourth morphia in his arm. Under the anesthetic we proceeded to reduce the fracture. We didn't for with the assistance of two interns, a husky orderly and anethetist pushing to the limit, we could not budge it. The muscle of the calf was in a tetanic condition. Then I remembered Dr. Webster. Sending for a tenotome I divided the tendon and found I was master of the situation.

Two surprises met me. First, the small amount of retraction of the severed tendon; second, the ease with which I could handle the bones, no difficulty in restoring them to their proper places and retaining them. I applied a circular cast and he came out with a leg he says is as good as the other. No pain or limp, does his hard labor each day; without trouble. He came in not long ago to show how fine it was. A thickening at the point of fracture is the only blemish.

Soon after a Pott's came in. I didn't waste any time but divided the tendon, adjusted the fragments, putting the angle in proper slant, applied a cast and it came out the best I ever did. Then I thought, why not others? Since then in all fractures of the lower limbs below the middle of the femur I have done it. All will recall in fractures of the lower portion of the femur the tendency of the lower fragment to drop down, imperiling the nerves and vessels in that portion. Below the knee, how the oblique would override, the spiral that wouldn't untwist, and the bettenoir Pott's at the ankle. How, after you had done your best, the trouble that came to your soul when some of your results met you on the street

with a limp and a splay foot. All these troubles are obliterated by this operation which puts out of commission the offending cause.

Yet, when the bone is firm enough to bear its burden, the tendon is ready for its part.

I saw the results of the work of the late Dr. Wallace Blanchard, of Chicago, on a bow-leg boy. Standing, before the operation, the boy's lower limbs made a complete hoop. Blanchard fractured both femurs and the bones in both legs at intervals of three months, each time dividing the tendo-achilles. Result at the end of the year, straight legs and perfect locomotion.

On one point these authorities agree. "Wait until the swelling subsides before putting on the permanent dressing."

I had my first lessons in bone setting in 1862 under that prince of surgeons, Daniel Brainard. His *dictum* was immediate reduction, restoration of the length of the limb, the kinks in the blood vessels were removed, restoring the circulation, relieving the swelling. I have always followed his advice.

What is the best method to retain the bone in the proper position? Here the authorities differ. I have tried a lot, finally settling on a circular plaster paris cast properly applied. We old-timers have worked out procedures that we have found helpful in these cases. Hence we stay with them. To do the work properly, three assistants beside the anesthetist are needed. Good, level-headed laymen are better than the average doctors you pick up. They will obey instructions and keep still and not annoy with irrevelent advice. The best one I ever knew was a night hack driver.

The ones who hold the limb and keep the traction should be seated comfortably. Have the bed ready before you begin. All injured lower limbs should be swung twelve inches above the mattress. When a patient lies over ten days in one position on his back, in a depression, he lies sweltering, paving the way for a bed sore. I found that by laying short boards across, between the springs and mattress, this was obliterated and the patient more comfortable. Don't put a rubber sheet under the linen, as it annoys by causing the back to perspire and itch. The limb must be swung if you expect good results.

In the railroad ward at St. Elizabeth Hospital in Lafayette I had placed over each bed a frame made with gas pipe, six feet in the clear above the mattress. These could be shifted to either side. Over the point where the leg will be suspended is a ten-pound spring balance, over the lower portion of the chest a section of broom handle eighteen inches long, low enough to be easily grasped. If you haven't these, then have one made by a handy man or a carpenter. Have two 2 x 4 pieces of studding, nine feet long, at one end, make notch three inches deep and two inches

wide; at the other end nail firmly boards two inches thick and twelve inches square for the base; for overhead a straight grained board two inches thick and 3 inches wide, long enough to extend one foot beyond each upright. This should be placed where the patient lies and lashed firm to the bed.

Now for the reduction. Wash and shave the limb, apply a lotion of equal parts of alcohol and saturated solution of alum. Don't put any iodine where you make the opening for the tenotome. The patient properly anesthetized, divide the tendon and reduce the fracture. This you will find easy if you have tactile sense. If you haven't, let some one else have the job.

The fracture reduced, while the limb is held steady, squeeze out the effused blood. Apply over the opening a sterile pad, retain with narrow adhesive on either side and half around the limb. Note the shape of the sound limb and place the fracture similar. Apply either a layer of thin sheet wadding or, what is better, a well-fitting stockinette, from the base of the toes to eight inches above the knee. Then go over it again, see that there is no displacement, that the length and contour corresponds with the sound limb. The plaster bandages should be fresh. Don't depend on the drug store. I quit salting the water long ago. While the plaster would set quicker, the final result was not as satisfactory. The water should be a little above blood heat. If the one who handles the bandages when he wrings it, grasps both ends he will save plaster and making a muss.

With leg flexed and held twelve inches above the table, start the first at the ankle. Have it snug around the malleoli, then up the foot to the base of the toes, reverse carefully back and up the leg. While waiting for the second, smooth what you have placed. See that it is absolutely smooth. With the second go up above the knee six inches. See that it is firm around the knee. See that the first has no wrinkles or constrictions. After the third apply on the back a strip of wire gauze one inch wide from the base of the toes to the bottom of the popliteal. Two more will usually be sufficient to hold everything in place. Then with a handful of creamy plaster go over the whole limb making it ship shape.

Have it held until it sets; this will take fifteen to twenty minutes. The task is not irksome if the holders are properly placed.

If the case is compound, use the same procedure with this addition: After the reduction, with the limb held firm, with both hands encircling, squeeze out all the effused blood. If the edges of the wound come together easily and don't retract, I don't use any sutures but place over the wound a compress saturated with tincture benzoin compound and retain with a light bandage. Then apply the plaster as with simple fracture.

There will be oozing and the cast stained. If the cast dries and the toes don't swell I leave it alone for forty-eight hours before opening. The limb being hung above the level of the body the liquids seek the lower levels, and there is but little swelling. I have never had any infection.

When you place the patient in bed have three slings of stout unbleached muslin four inches wide, long enough to catch the hook of the balance, at the foot, middle and knee. The patient can now rest in comfort. With the handhold, lift himself, shift his position, sit up with a back rest while the limb swings with no chance of displacement.

When should the cast be opened? That depends—if the toes don't swell and the patient is comfortable, I am in no hurry, for I want it thoroughly dry. For the shell is of more use later than when opened before.

When I open, I first draw a line on both sides, just above the bulge of the calf, to catch the sides, and the same at the foot so it will be held firm when the top is off. At the knee, swing around the patella, sufficient to permit the manipulation of it. With a pruning knife, cut a groove along the line. With an ear syringe filled with vinegar fill the groove. This will soften the plaster so it can be easily shaved. Continue the procedure until you reach the material surrounding the limb. With bandage scissors divide it and lift off the top, to see how things look. Pass the fingers down the spine of the tibia, see if it corresponds with the other. Sponge the exposed parts with a handful of gauze wrung from hot water, have patient try out the toes, see how they wiggle. Give the patella a few manipulations. If things are satisfactory, leave it open. If you can place the bed before a window give it the sun the balance of the day. Nothing like it for bruised tissues or broken bones. At night replace the cover, to guard against accidents. The limb should be open each day. If the cast has been properly applied, there is no danger of displacement, as both ends are held firmly.

When there is firmness at the fracture point so there is no motion, I divide at the popliteal space and give the knee passive motion and encourage the patient to attempt lifting the knee. At the end of the eighth week the bones are usually firm enough to permit lifting the leg out of the case, and laying it on a rubber sheet. Give it a hot soap bath, finish with a cold shower, giving the muscles a good kneading during the procedure. After drying, replace and swing up. This should be done at least three times a week.

How soon should the patient be put on crutches? The rule I adopted is, as soon as the bone has enough firmness that the patient can lift it alone and partially flex it. I get them out under supervision.

I met cases before x-ray days, persons that had been treated as sprains of the ankle and the



joint was loose and wobbling. This condition I found was the result of a fracture of the fibula at the narrow point just above the malleolus. There was no displacement, the bone uniting after a prolonged convalescence and a lame ankle the result. Pressure along the fibula would elicit a tender point; deep pressure revealed crepitation and more pain.

Sometimes a Pott's comes in badly swollen. Before you attempt to fix it, reduce the swelling. Place the patient on the back; flex the leg. Place it in a deep bucket filled two-thirds with hot salt water, adding more as it cools; a blanket around the top helps. Keep it there until the skin wrinkles. It may take several hours or days, but do it before you cut the tendon. This is what I have learned in treatment of these fractures. Dr. Brainard insisted that you make your fracture cases comfortable if you expect good results. I have done it for more than half a century.

I can't recall the time when I learned to swing

them, I didn't learn it from the books or authorities.

I always watch my cases closely. See them if possible daily. Don't trust them to internes, for so many internes don't like to bother with them. I can only recall one who has always been ready and anxious to learn more.

#### CONCLUSION

With all the brain work that has been expended on the treatment of this so common class of injuries, none had wit enough to find the solution, and it was the almost unknown Dr. J. P. Webster who showed us the light. All have attempted to hold the extension by weight hung to the leg lying on the bed, where every movement of the body would be transmitted to the broken bones.

With the muscles paralyzed, the limb swung up with both ends firm there is no chance for distortion.

#### ANEURYSM OF INTERNAL CAROTID ARTERY

Vilhelm Magnus, Oslo, Norway (*Journal A. M. A.*, May 28, 1927), had good results from avulsion of the trigeminal root in a patient, aged 69, who was completely relieved of his pain. The patient's condition was a trigeminus involvement of the right side, besides a paralysis of the sympathicus fibers which innervate the right orbit and an abducens paralysis on the same side. Magnus made the diagnosis of a slowly growing tumor in the trigeminal region, which first compressed the nervus abducens and then the gasserian ganglion. He performed an operation in order to remove the trigeminus root. When the dura mater was detached, the middle meningeal artery was lacerated down on the base of the cranium, and as it was very difficult to ligate so far down, the external carotid artery was ligated on the neck. As the dura mater was detached from the base of the cranium, Magnus came on a tumor about the size of a chestnut with a smooth surface and glistening like mother of pearl, strictly limited and situated on the surface of the gasserian ganglion. During the further attempts at detaching the dura mater from the surface of the tumor in its medial part, a hole was torn and the contents of the tumor poured out; they were yellowish brown, and came out in portions. About half was easily emptied with a spatula; while the rest was being enucleated, a great gush of blood that could not be stopped by tamponade poured out. The internal carotid artery was now ligated, and the bleeding stopped. **The contents of the tumor could now be emptied without difficulty and the lateral wall, which was as thin as paper, extirpated.** Magnus did not remove the medial wall for fear of injuring the sinus cavernosus. Afterward the trigeminus root was removed.

#### FACTORS IN ADVANCEMENT OF ORTHOPEDIC SURGERY

JOHN PRENTISS LORD, Omaha (*Journal A. M. A.*, Aug. 27, 1927), reviews the evolution of orthopedic surgery. Naturally, he says, the advances in orthopedic surgery have been coincident with the development of general surgery, and its progress has been so rapid and spectacular that general surgeons were fully occupied by its major achievements. The status of orthopedic surgery in hospitals and in teaching institutions varies greatly. It is usually under the dominance of general surgery, and numerically the orthopedic surgeons are in the minority. There is great lack of uniformity in curricula and great variation of custom in the distribution

and assignment of cases to orthopedic departments. The newer and broader classification of orthopedic conditions includes fractures, osteomyelitis and joint diseases, all

of which are prone to result in deformity and disability. One of the larger functions of orthopedic surgery is to prevent or minimize the latter conditions. Hence to accomplish these results such cases should be assigned to the orthopedic department on admission. Many orthopedic surgeons have reason to complain that too often their departments are but the dumping ground, the junk heap, for maltreated cases from general surgeons and general practitioners. An outstanding factor in the advancement of orthopedic surgery is that, in recent years, great interest in the cripple has been shown. The particularly strong appeal of the crippled child has loosened the small as well as the large purse strings. All these and similar evidences of serious interest in the crippled child serve to advance orthopedic surgery. The organized agencies for the care of the crippled are so numerous and so active that very large numbers of cases have become available for clinical and teaching purposes. This command of material has done much to increase the experience and enhance the skill of orthopedic surgeons. State hospitals for crippled children early demonstrated the necessity for wholesome provision for the care of our large numbers of crippled and physically handicapped children, now estimated to number nearly one-half million. Not all states have made this provision, and even those have not fully met the requirements. In some instances large bequests have supplemented state or community development of institutions for the relief, care, education and vocational training of crippled children. All this private and public interest in the cause of the cripple has been tremendously augmented by the assumption of the care of indigent crippled children and their temporary adoption by many organizations. Clinics for crippled children at state and county fairs and in connection with county and district medical societies, with the co-operation of the visiting nurses, increase the interest of all in the care and treatment of orthopedic cases and enhance the practice of those in the orthopedic specialty. One of the reasons for a wider and more general improvement of orthopedic principles and practice is the fact that surgeons are becoming better orthopedists and orthopedists are becoming better surgeons. It is therefore gratifying to note that much of our present-day progress comes from both our highly trained specialists in orthopedic surgery and our orthopedically minded general surgeons.



FRANK W. CREGOR  
President Indiana State Medical Association  
INDIANAPOLIS  
1927





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**FRANK GASTINEAU**  
SECRETARY SECTION ON MEDICINE  
INDIANAPOLIS



# THE INDIANAPOLIS SESSION

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The annual session of the Indiana State Medical Association will be held at Indianapolis, Wednesday, Thursday and Friday, September 28, 29 and 30. Leave all your cares behind and prepare for a thoroughly good time!

## ROADS

Indianapolis is the capital city of Indiana, and therefore is easily accessible from all directions, either by railroad or highway. Indianapolis is the convergence point for seventeen steam railroad lines; thirteen interurban lines, and numerous hard surfaced highways, including two arterial routes, the Dixie Highway and the National Highway. Everyone who is coming by automobile should consult state highway bulletins to determine the best routes.

## THE CITY

You will find interest in the rapidly growing hospital facilities of Indianapolis. With new units completed at the City Hospital, and other additions being added to the Indiana University School of Medicine, and the magnificent group of hospitals which some day will comprise one of the most important "medical centers" of the central west, Indianapolis believes that she has something worth while to offer to physicians from all parts of the state. If you have not visited Indianapolis recently, you will want to view the imposing ten million dollar World War memorial plaza, which is now under construction. Five entire city blocks, starting two squares north of the Circle, are being swept clear of buildings to make way for this unparalleled memorial, which will be the greatest in the world when completed. You will admire the new Chamber of Commerce building and numerous other fine new edifices which have been erected in the last year or so.

During your sojourn in the capitol city you will find much that will attract your attention. On White River is located beautiful Broad Ripple Park, which possesses, in addition to amusement devices, the largest outdoor swimming pool in the world. At Riverside Park there is another large amusement center. Twenty-five public parks, some of them nationally reputed for beauty of landscapes, are linked by a system of broad, smooth surfaced boulevards. By street car, taxi,

motor bus or automobile, all these recreational centers are reached easily. Indianapolis has nine large theaters and more than sixty motion picture houses. With its American Association professional baseball in season; pools and carefully supervised river beaches; side trips to natural beauty spots; tennis and horseshoe courts; and free municipal outdoor theater attractions in summer, Indianapolis offers a wealth and variety of entertainment for visitors of all ages and inclinations.

Every visitor who comes to Indianapolis meets with some form of club hospitality while in the city. The new Indianapolis Athletic Club has been pronounced one of the finest of its kind in the world. The Columbia Club, one of the oldest club organizations in the United States, is housed in its own magnificent new home. The Indianapolis Lodge of Elks recently completed a splendid new club house. The University Club, the Hoosier Athletic Club, and the Indianapolis Club are included among other institutions of the kind in the city. Murat Temple, one of America's most ornate houses for Nobles of the Mystic Shrine; the club house of the Knights of Columbus; the Masonic Temple and numerous other buildings devoted to the social and fraternal life of Indianapolis add to the fame of the



WILLIAM S. TOMLIN  
Chairman Committee on Arrangements  
INDIANAPOLIS

capitol city as a city where the visitor is well received.

Congregations of two hundred and seventy Indianapolis churches, of every denomination, join with other agencies of the city to welcome and entertain convention visitors having a religious interest.

The John Herron Art Institute; the Soldiers' and Sailors' Monument, which is the second tallest shaft in America; the world-famous Motor Speedway; the James Whitcomb Riley home on Lockerbie Street; the Riley Hospital for Crippled Children; the historic home of former President Benjamin Harrison, are other points of interest that you will want to see.

Indianapolis is a wide-awake business city, with a diversity of industrial activity equalling, if not excelling, that of any city of its class in America. More than twelve hundred manufacturing plants are here. The city has forty-five

hundred retail stores, many ranking with the finest of the nation. Three hundred wholesale firms supply the needs of retailers in a widespread rich agricultural area surrounding Indianapolis. Any manufacturing plant, any wholesale or retail establishment, any of our great newspaper plants or public schools may be inspected. The larger establishments employ guides to conduct visitors through their various departments.



INDIANAPOLIS CITY HOSPITAL  
Administration—Nurses' Home and Surgery Unit

The Convention Bureau of the Chamber of Commerce, because it is greatly interested in entertaining the members of the Indiana State Medical Association this year, accepts the responsibility of being host to the Association during the convention days. We are assured that we will find the most friendly hospitality reflected in the department of hotel employees, store clerks, uniformed workers of the public utilities and the police who are especially efficient and considerate in their contact with the visiting public.

It is an interesting fact that Indianapolis is the largest inland city of the United States not on navigable water, from the standpoint of transportation facilities and volume of business; has approximately twelve hundred industries manufacturing over one thousand distinct articles. It has a population of 383,000, with more homes per thousand people than any other city in the country over 200,000 population. Indianapolis has the largest traction terminal passenger station, the largest traction freight station, and the largest bus terminal in the world. It is the site of the headquarters of many organizations, such as the American Legion, International Typographical Union, etc.

Indianapolis has nearly ninety hotels, the largest of which are conveniently located downtown, especially equipped to care for conventions and other large gatherings. Every member attending the convention is assured of comfortable and satisfactory accommodations during his stay in Indianapolis.

## GOLF

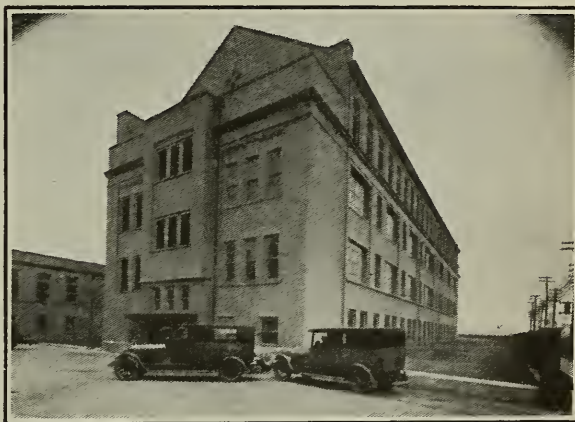
Indianapolis has fourteen eighteen-hole golf courses, and the only thirty-six-hole municipal golf course in the world. The annual tournament of the Indiana State Medical Golf Association will be held at the Indianapolis Country Club starting at 1:30 Wednesday afternoon, September 28. Golf trophies will be presented at the Wednesday evening smoker at the Athenaeum.

## HEADQUARTERS

The Indianapolis City Hospital has been selected as headquarters for the Association convention. A corps of assistants will remain at headquarters where everyone is asked to go at once and register and see about his lodging quarters. All information about any phase of the convention activities will be dispensed at the desk marked "Information."

## INDIANAPOLIS CITY HOSPITAL

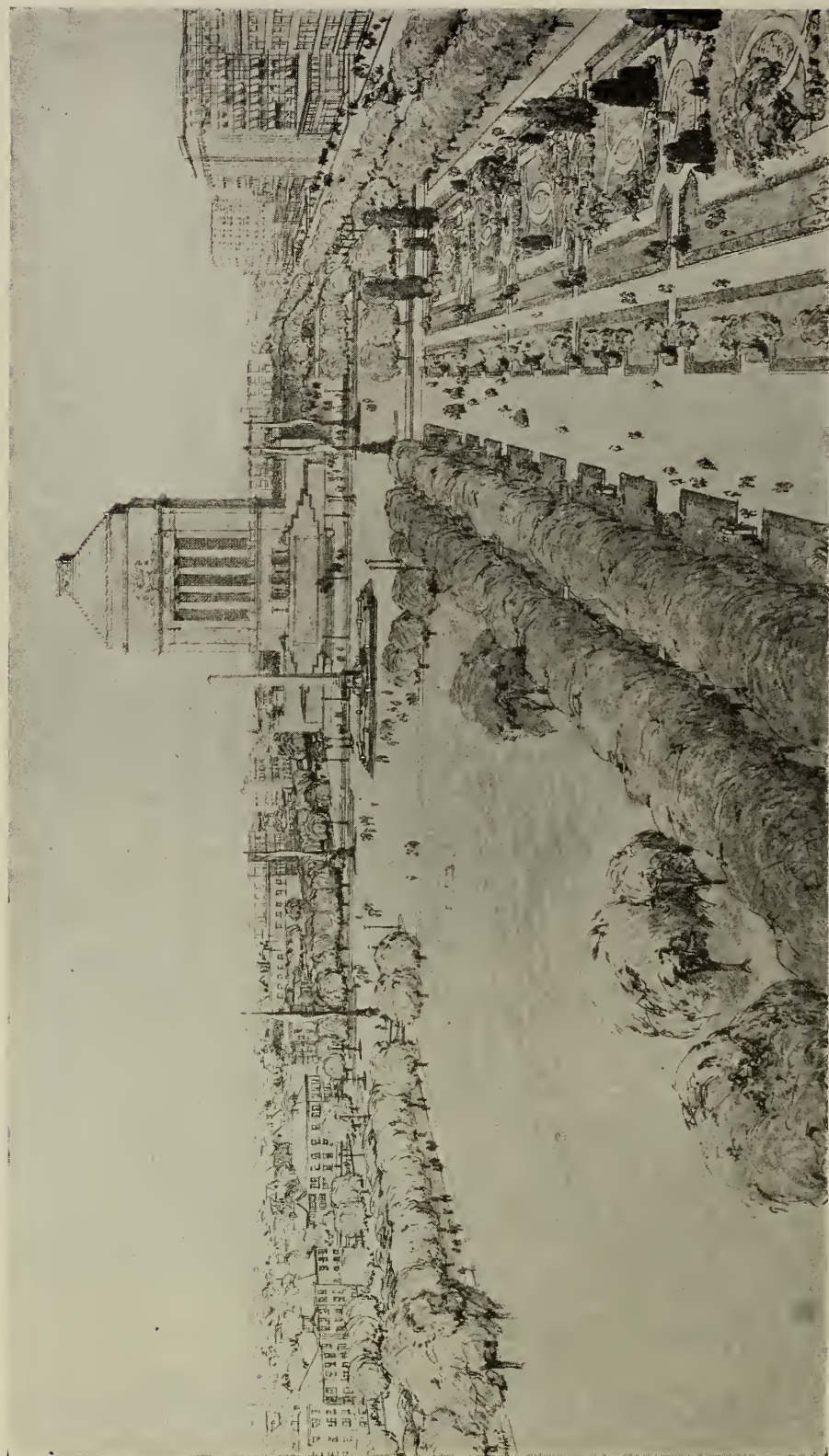
The history of the origin and progress of the Indianapolis City Hospital tells of an epidemic of small pox in the early '50's, which brought the realization to the medical profession of the necessity of some way to meet the needs at such a time. Dr. Livingston Dunlap, a member of the City Council, was the forcible factor in getting a site selected and bought, and the money appropriated for a hospital. The site chosen was the present one, and the first building was erected in 1859, at a cost of \$25,000, but the City Council refused money for equipment, and for a time the building became known as "Dunlap's Folly." The Civil War came a little later and the Governor chose Dr. Kitchen and Dr. T. J. Jameson to care for the unorganized troops who came pouring into the city. The care of the troops in camp was



INDIANAPOLIS CITY HOSPITAL  
Surgical Unit—Housing Auditorium and Various Clinics.

taken over by Dr. Jameson, and the hospital by Dr. Kitchen, who conducted it through the entire period of the war—from May, 1861 to June 15, 1865. During this time almost 13,000 wounded and sick soldiers were treated at this hospital, and as Indianapolis was only a town of 12,000 inhabitants, it was quite an undertaking. The property was used for a soldiers' home from July,





PROPOSED PLAN OF WAR MEMORIAL  
INDIANAPOLIS



1865, to April, 1866, when it was vacated by the removal of the soldiers to Knightstown.

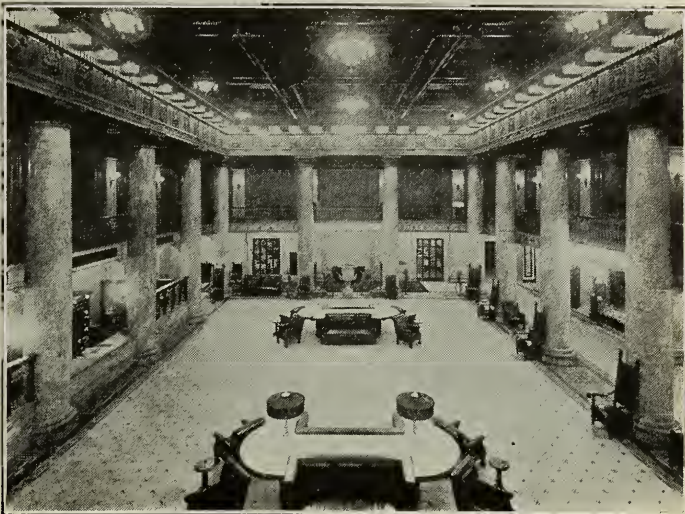
In May, 1886, an ordinance was passed for the government of the hospital, a Board of Trustees was elected, and Dr. G. Z. Woollen selected as superintendent. Dr. P. H. Jameson was at the time a member of the Council.

The register of the hospital while under the control of the city authorities shows that the whole

and W. H. Davis filled the position of superintendent in the order named. July 1, 1879, Dr. William Wishard was elected superintendent and accepted the place. The location at this time was much more inaccessible than at present; no street cars, no gas mains within several squares of the hospital. Electricity for lighting was not in general use; there were no water mains in the lo-



ELKS' CLUB



LOBBY OF CLAYPOOL HOTEL

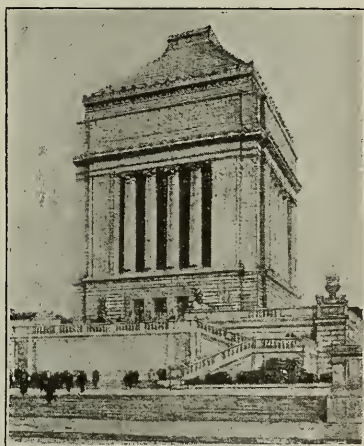
number of patients received from 1866 to 1883 was 12,111. Number of births, 662, and the ratio of mortality was slightly in excess of 5%. At the expiration of Dr. Woollen's time as superintendent—1870 to 1879—Dr. E. Hadley, J. W. Marsce, A. W. Davis, W. B. McDonald, F. J. Van Vories

cality. During the administration of Dr. Wishard much was added. By much persuasion on the part of Dr. Thomas Harvey the City Council submitted to the erection of a building containing ward space only.

Until 1883 there were only two nurses in this institution, one a male nurse, who had formerly been a patient and was in charge of the male ward. The other a female nurse, in charge of the



SOLDIERS AND SAILORS MONUMENT



SHRINE OF WORLD WAR MEMORIAL UNDER CONSTRUCTION

medical, surgical, and obstetrical patients, in the female wards—a woman of middle age, who had acquired some experience. At that time no records were kept by nurses and the records kept by the busy physicians were very imperfect. Dr. Wishard was instrumental in securing financial



assistance from the city for the Flower Mission Training School for Nurses, which was established in 1883. This was the first introduction of trained nurses into the wards of the City Hospital. He secured recognition for them from the medical profession, and not until their introduction into the wards were they ever employed by the physician in private practice.

Following Dr. Wishard as superintendent of the hospital was Dr. John H. Oliver, from 1887

1915 and remained until June, 1918, at which time Dr. Herman G. Morgan, then secretary of the board of health, took the place. In March, 1919, Dr. Harry L. Foreman was elected superintendent, and he served until January 1, 1922. After Dr. Foreman came Dr. Richard A. Poole who served from January 1, 1922, until December 4, 1922. Dr. Cleon A. Nafe was appointed superintendent December 4, 1922, and served until September 1, 1926. Dr. William A. Doeppers



U. S. COURT HOUSE AND POST OFFICE

to 1890. Dr. George F. Edenharter, now deceased, and formerly superintendent of the Indiana Hospital for the Insane, Dr. William Wright, Dr. Hugo Pantzer, Dr. Norman Jobs and Dr. J. L. Freeland have served as superintendents. During the administration of Dr. John Sluss two units, known as the Burdsal Memorial Units, were erected and dedicated in 1914. Dr. Thomas L. Sullivan became superintendent in



INDIANAPOLIS ATHLETIC CLUB

was appointed superintendent September 1, 1926, and is the superintendent at the present time.

At the present time what was formerly known as the Old City Hospital, that is, the red brick unit which was erected in 1885, has been condemned by an order from the State Fire Marshal as being unsafe and not a fit place to house patients; so the building has been entirely evacuated and two portable buildings, borrowed from



STATE CAPITOL

the Board of School Commissioners, have been erected just south of the laundry building to accommodate two wards. Room was made for the male colored ward in the basement of the administration building.

The hospital as it stands today consists of an administration building, erected at a cost of approximately \$200,000. A nurses' home, erected in 1923, housing one hundred and fifty nurses, erected at a cost of \$225,000. Just west of the administration building is the new surgical unit, dedicated February 16, 1927, which is a four-story building, housing the general surgeries, ear, nose and throat surgery, orthopedic department, X-ray department, obstetrical ward with two delivery rooms, an auditorium with a seating capacity of one thousand, and two class rooms for clinical demonstration for the Training School for Nurses, erected at a cost of \$400,000.

Today the training school is one of the best in this part of the country and is an accredited school, having reciprocity with the state of New York. Its destinies are directed by Miss Ethel E. Carlson, director of nurses, who is striving to make it of the greatest possible service to both the student and the patient in the hospital. The training school maintains a post-graduate course including surgery, obstetrics, pediatrics, contagious diseases and dietetics.

The hospital has a bed capacity of six hundred beds. In 1926 a total of 8,545 patients were admitted to the hospital. The intern staff consists of ten residents or senior interns, and twenty-six interns; serving on a rotating service throughout the institution for a period of one year. The visiting staff numbers two hundred and forty physicians covering every specialty in medical science.

It will be of interest to former students and interns who had their training in the wards of the

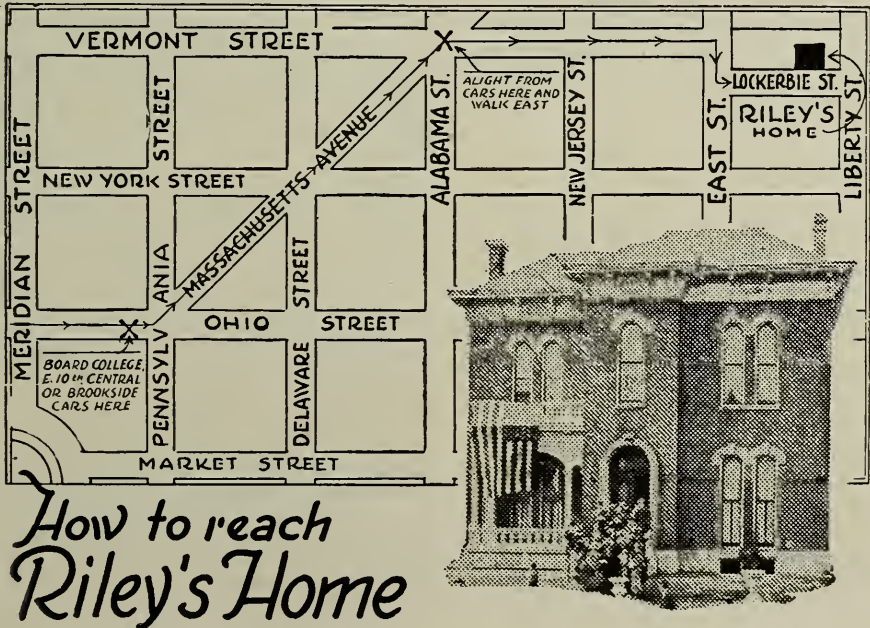
old hospital to know that there is no more amphitheater where in days gone by memorable clinics under such men as Dr. George Cook, Dr. A. C. Kimberlin, Dr. Frank Wynn, Dr. E. F. Hodges, Dr. John F. Hurty, Dr. W. F. Foreman and many others. Today this old room, formerly the amphitheater, is used as a paint shop. In a few months' time, the building will be torn down, but nothing will ever destroy pleasant memories and friendships of student days.

ENTERTAINMENT

The annual golf tournament will be held at the Indianapolis Country Club, Wednesday, September 28, at 1:30 p. m. On Wednesday evening the annual smoker and "Medical Follies" will be held at the Athenaeum. Golf prizes will be distributed then. A dinner meeting for county secretaries, state officers and councilors will be held at the Athenaeum, Michigan and New Jersey streets, at 6:30 Wednesday evening. At seven o'clock Thursday evening there will be a banquet and dance in the Riley Room of the Claypool Hotel.

LADIES' ENTERTAINMENT

On Wednesday evening, September 28th, there will be a musicale at the Department Club, Seventeenth and Meridian streets. At nine o'clock on Thursday morning, automobiles will leave the Claypool Hotel for a drive and visit to the City and Riley Hospitals. At eleven o'clock on Thursday morning automobiles will leave the City Hospital for a drive through the northern part of the city. At twelve thirty there will be a luncheon and bridge at the Marott Hotel. At seven o'clock Thursday evening the ladies will be entertained at a banquet and dance in the Riley Room of the Claypool Hotel. Friday morning at nine thirty a tour of inspection of the Real Silk Hosiery Mills will be made. Automobiles will leave the Claypool Hotel at nine thirty and the





tour of inspection will be completed at eleven thirty.

The Convention Bureau of the Chamber of Commerce of Indianapolis is co-operating with the Woman's Auxiliary in making arrangements for this program. The Chamber of Commerce will provide special police escort on all sight-seeing tours.

### OFFICIAL CALL TO THE HOUSE OF DELEGATES

The next annual session of the Indiana State Medical Association will be held at Indianapolis, September 28, 29 and 30, 1927.

The House of Delegates will be constituted as follows: Marion County, 9 delegates; Allen County, 3 delegates; Lake County, 3 delegates; St. Joseph County, 3 delegates; Vanderburg County, 2 delegates; Vigo County, 2 delegates; the other seventy-eight counties, each one delegate; thirteen councilors; the ex-presidents, namely G. W. H. Kemper, G. F. Beasley, C. S. Bond, M. F. Porter, W. N. Wishard, J. C. Sexton, G. W. McCaskey, J. B. Berteling, G. T. McCoy, T. C. Kennedy, W. F. Howat, J. H. Oliver, J. R. Eastman, W. H. Stemm, C. H. McCully, David Ross, W. R. Davidson, C. H. Good, Samuel E. Earp, E. M. Shanklin and Charles N. Combs. In addition to these, the president, secretary and treasurer, and the editor of *THE JOURNAL*, all without power to vote except in case of a tie, when the president shall cast the deciding vote.

Blank credentials have been sent by the secretary to each county society, and the properly executed credentials for the delegates should be mailed immediately to Thomas A. Hendricks, 1004 Hume-Mansur Building, Indianapolis, or brought to the session. No delegate will be seated unless wearing the official badge.

The House of Delegates will convene promptly at three o'clock on Wednesday afternoon, September 28th, in the Assembly Room of the City Hospital, and again at seven o'clock on Friday morning, September 30th, for a breakfast meeting, at the City Hospital.

The order of business will be as follows:

1. Call to order by the President.
2. Roll call and seating of qualified delegates.
3. Reading of the minutes of previous meetings.
4. Report of the Executive Secretary.
5. Report of the Treasurer.
6. Report of the Chairman of the Council.
7. Report of standing committees:
  - a. Credentials.
  - b. Administration and Medical Defense.
  - c. Public Policy and Legislation.
  - d. Bureau of Publicity.
  - e. Medical Education and Hospitals.
  - f. Scientific Work.
  - g. Necrology.
  - h. Industrial and Civic Relationship.

- i. Delegates to the A. M. A.
- j. Arrangements.
- k. Diphtheria.
- l. Budget.
- m. Post-Graduate Study.
8. Reading of Communications.
9. Reading of Memorials and Resolutions.
10. Unfinished Business.
11. New Business.
12. Adjournment.

The election of officers will be the first order of business Friday morning at seven o'clock. In addition to the regular officers, the terms of the following officers expire January 1, 1928, and their successors must be elected at the session: Delegates to the American Medical Association to succeed Albert E. Bulson, Jr., Fort Wayne, and E. M. Shanklin, Hammond; alternate, B. G. Keeney, Shelbyville, and another alternate to be elected for the ensuing two years. Member of the Committee on Medical Education and Hospitals to succeed Burton D. Myers, of Bloomington, for the ensuing three years. Member of the Committee on Publicity to succeed William N. Wishard, Indianapolis, for the ensuing three years. Delegates from counties comprising the second, fifth, eighth and eleventh districts are reminded that the terms of their councilors will expire December 31, 1927, and new councilors should be elected to succeed the following:

Second District—Joseph Smadel, Vincennes.

Fifth District—Joseph H. Weinstein, Terre Haute.

Eighth District—M. A. Austin, Anderson.

Eleventh District—C. S. Black, Warren.

Some of these elections may already have been held but they should be reported to the House of Delegates at this session for confirmation.

THOMAS A. HENDRICKS,  
Executive Secretary.

### ANNOUNCEMENTS

All members and those accompanying them are requested to register upon their arrival. The Bureau of Information and Registration will be in the lobby of the City hospital.

Members of the House of Delegates are reminded that the first meeting will be on Wednesday afternoon at 3 o'clock. Members of the Council will have a luncheon meeting at 12:15 on Wednesday.

Essayists are reminded that all papers presented before the Association become the property of the Association, and, therefore, are not to be published or submitted for publication elsewhere than in the *Journal of the Indiana State Medical Association*.

The election of officers will be the first order of business at the meeting of the House of Delegates to be held Friday morning, September 30th. No member of the House of Delegates is eligible to office, and delegates to the American Medical Association must have been members in good standing of the A. M. A. for the past two years.

You are requested to wear the official badge which is

supplied when you register, when attending or participating in the meetings. Members of the House of Delegates will have designating badges. Only those who are accredited delegates are entitled to vote at the meeting of the House of Delegates or even to address the House of Delegates without special permission.

Register early. The booth for registration will be open throughout the session. Please have your pocket cards with you in order to avoid delay in registration. If you have paid your dues to your county society secretary *only recently* and have not yet received your membership card, present a receipt from the county secretary and you will be permitted to register. Please *get your badge and wear it*.

HOTELS IN INDIANAPOLIS

We are publishing a list of the hotels in Indianapolis which are members of the Convention Bureau of the Indianapolis Chamber of Commerce. We also are publishing the rates of these hotels. It would be wise for

medical profession of the state."

In the Indiana University group are: Robert W. Long Hospital, James Whitcomb Riley Hospital, Indiana University School of Medicine and the new Coleman Hospital, which is under construction. This group adjoins the City Hospital, and all those interested in the medical profession of Indiana should take advantage of this invitation.

The Indiana State Medical Association is indebted to the Indianapolis City Board of Health for the use of the Indianapolis City Hospital as convention headquarters. It is indeed a pleasure for the officers of the Association to express their appreciation to the following physicians who compose the City Board of Health: E. E. Padgett, Arthur E. Guedel, Fred E. Jackson, Wm. E. Mendenhall; Herman Morgan, secretary of the Indianapolis City Board of Health, and Wm. E. Doeppers, superintendent of the Indianapolis City Hospital.

NAME AND LOCATION	TYPE OF ROOM	WITHOUT BATH	WITH BATH
Hotel Barton	Single	\$1.25 to \$2.00	\$1.50 to \$4.00
505 North Delaware street	Double	2.00 to 3.50	3.00 to 5.00
Brevort Hotel	Single	1.25 to 1.50	1.75 to 2.00
207 North Illinois street	Double	2.50 to 3.00	3.50
Claypool Hotel	Single	2.00	2.50 to 5.00
Washington and Illinois streets	Double	3.00	4.50 to 7.00
New Colonial Hotel	Single	1.50	1.75 to 2.50
236 North Illinois street	Double	2.50	3.00 to 4.00
Denison Hotel	Single	1.25 to 1.50	2.00 to 3.00
139 North Pennsylvania street	Double	2.00 to 3.00	3.50 to 5.00
Hotel English	Single	1.50 to 2.00	2.00 to 3.00
134 Monument Place	Double	2.00 to 3.00	3.50 to 4.50
Grand Hotel	Single	1.00 to 1.50	1.50 to 2.00
105 South Illinois street	Double	2.00 to 2.50	2.00 to 3.00
Hotel Lincoln	Single	None	2.50 to 4.50
117 West Washington street	Double	None	4.00 to 7.00
Hotel Linden	Single	1.25 to 1.50	2.50 to 3.50
311 North Illinois street	Double	2.00 to 2.50	3.50 to 4.00
Lorraine Hotel	Single	1.00 to 1.50	1.50 to 2.50
201 West Washington street	Double	1.50 to 2.50	2.50 to 4.00
Morton Hotel	Single	1.50 to 2.00	2.25 to 2.50
40 Monument Place	Double	2.50 to 3.00	3.50 to 4.00
Oneida Hotel	Single	1.25 to 1.50	1.75 to 2.00
214 South Illinois street	Double	2.50 to 3.00	3.50 to 7.00
Hotel Puritan	Single	1.00 to 1.25	1.50 to 2.50
101 North New Jersey street	Double	1.50 to 2.00	2.50 to 3.50
Roosevelt Hotel	Single	1.50 to 2.00	2.50
220 West Ohio street	Double	3.00 to 3.50	4.00
Hotel Royal	Single	1.50	2.00 to 2.50
323 North Illinois street	Double	2.00	3.00 to 3.50
Hotel Severin	Single	None	2.50 to 5.00
201 South Illinois street	Double	None	4.00 to 7.00
Hotel Spink	Single	None	2.00
233 McCrea street	Double	None	3.50 to 4.00
Spink-Arms Hotel	Single	None	3.00 to 7.00
410 North Meridian street	Double	None	5.00 to 10.00
Washington Hotel	Single	2.00	2.50 to 4.00
34 East Washington street	Double	None	4.00 to 5.50
Williams Hotel	Single	1.50	1.75 to 2.50
253 West Washington street	Double	2.50	3.00 to 4.50

any doctor who is going to attend the annual session of the Indiana State Medical Association to make his hotel reservations at once.

An invitation has been extended to all members of the Indiana State Medical Association and their guests and wives who attend the state meeting to visit the Indiana University Hospitals. This invitation comes from Robert E. Neff, administrator of the Indiana University Hospitals, who writes:

"Our institutions are open and subject to your disposal any way you choose during this meeting. We are naturally quite eager to keep in close contact with the

CONDENSED PROGRAM

Wednesday, September 28, 1927

Morning

Registration, 9 a. m. to 6 p. m., at Indianapolis City Hospital.

Technical exhibit, 9 a. m. to 6 p. m., at Indianapolis City Hospital.

Afternoon

Meeting of the Council, 12:15 p. m. Luncheon at Indianapolis Athletic Club.



Golf tournament, 12:00 to 5:00 p. m., eighteen holes medal play, Indianapolis Country Club.

(Members of the House of Delegates and all those who are unable to play in the afternoon may arrange to play their round after 10 o'clock in the morning.)

Meeting of the House of Delegates, 3:00 p. m., assembly room, Indianapolis City Hospital.

#### Evening

Dinner meeting of county society secretaries, state officers and councilors at 6:30 p. m., Athenæum, Michigan and New Jersey streets. F. C. Warnshuis, Grand Rapids, Speaker, Subject: "County Medical Society Secretary—The Goat."

State medical frolic and smoker, 8:15 p. m., Athenæum.

Distribution of golf prizes.

*Thursday, September 29, 1927*

#### Morning

Registration 8:00 a. m. to 5:00 p. m., Indianapolis City Hospital.

Technical exhibit 9:00 a. m. to 6:00 p. m., Indianapolis City Hospital.

Joint meeting of all sections and general clinic 8:30 a. m. to 12:30 p. m., assembly room, Indianapolis City Hospital.

#### Noon

Luncheon served at the Indianapolis City Hospital.

Luncheon for women physicians, social gathering and conference at Riley Hospital.

#### Afternoon

Special and general clinics 1:00 to 5:00 p. m., Indianapolis City Hospital.

Meeting of sections to elect officers for 1928, 5:15 p. m., Indianapolis City Hospital.

#### Evening

Banquet and dance, Riley room, Claypool Hotel, 7:00 p. m.

*Friday, September 30, 1927*

#### Morning

Registration 8:00 a. m. to 1:00 p. m., Indianapolis City Hospital.

Technical exhibit 8:30 a. m. to 1:00 p. m., Indianapolis City Hospital.

Meeting of House of Delegates (breakfast) 7:00 a. m. Indianapolis City Hospital.

Meeting of the council immediately following adjournment of the House of Delegates, Indianapolis City Hospital.

General scientific meeting 9:30 a. m. to 11:30 a. m., Indianapolis City Hospital.

### PROGRAM FOR WOMEN'S ENTERTAINMENT IN CHARGE OF THE LADIES AUXILIARY OF THE INDIANAPOLIS MEDICAL SOCIETY

#### Wednesday Evening, September 28

8:15 p. m.—Musical at Department Club, 17th and Meridian streets.

#### Thursday Morning, September 29

9:00 a. m.—Automobiles leave Claypool hotel for drive and visit to the City and Riley hospitals.

11:00—Automobiles leave City hospital for drive around motor speedway and through northern part of city.

12:30—Luncheon and bridge, Marott hotel.

#### Thursday Evening

7:00—Banquet, Riley room, Claypool hotel.

#### Friday Morning, September 30

9:30—Tour of inspection of Real Silk Hosiery Mills. Automobiles leave Claypool hotel at 9:30 and inspection completed by 11:30.

The convention bureau of the Chamber of Commerce will co-operate with the ladies auxiliary of the Indianapolis Medical Society in carrying out this program through Mrs. Isabel Garland, hostess of the women's convention bureau, Chamber of Commerce. The Cham-

ber of Commerce will provide special police escort on all sight-seeing tours.

The Indiana University hospital group which includes the Riley hospital for children, the Robert E. Long hospital, the new Coleman hospital, and the Indiana University School of Medicine will be open for inspection by the profession, wives and guests of all physicians and their friends during the state meeting.

### OFFICIAL PROGRAM OF THE ANNUAL SESSION OF THE INDIANA STATE MEDICAL ASSOCIATION

To Be Held at Indianapolis, Indiana,  
September 28, 29, 30, 1927

#### House of Delegates

First meeting in assembly room, Indianapolis City hospital, Wednesday, September 28 at 3:00 p. m.

Second meeting, Indianapolis City hospital, Friday morning, September 30 at 7:00 a. m. (Breakfast meeting.)

#### Council

First meeting, luncheon in special dining room, Indianapolis Athletic club, Wednesday, September 28 at 12:15 p. m.

Second meeting, Friday, September 30, immediately following adjournment of House of Delegates, Indianapolis City hospital.

Additional meetings at the call of the chairman of the council.

#### General Meetings and Clinics

Assembly and clinical rooms, Indianapolis City hospital, Thursday morning and afternoon, September 29, and Friday morning, September 30.

#### Secretaries' Meetings

County secretaries dinner and conference 6:30 p. m., Wednesday, September 28 at the Athenæum, Michigan and New Jersey streets.

#### Meeting of Women Physicians

Luncheon, social gathering and conference, Riley Hospital, 12:15 p. m., Thursday, September 29. Nettie Powell, Marion, Speaker.

#### Technical Exhibits

Wednesday, Thursday and Friday, Indianapolis City Hospital.

#### Registration

Wednesday 9:00 a. m., until Friday 1:00 p. m., Indianapolis City hospital.

#### Entertainment

Wednesday afternoon, September 28, golf tournament 12:00 to 5:00 p. m., Indianapolis Country club.

Wednesday evening, September 28, smoker and medical frolic at Athenæum, 8:15 p. m.

Musical, Woman's Department club, 8:15 p. m.

Thursday noon, September 29, luncheon and bridge for ladies at Marott hotel.

Thursday evening, banquet for physicians, wives and guests in Riley room, Claypool hotel 7:00 p. m.

### SCIENTIFIC PROGRAM GENERAL MEETING

*Thursday, September 29, 1927, 8:30 A. M.*

(Assembly Hall, Indianapolis City Hospital)

Organization.

Address of Welcome

President's Address.....Frank W. Cregor

1. Henry A. Christian, Boston, Mass.

Subject: "Diuretics in the Treatment of Cardio-Vascular Renal Diseases."

2. Edwin W. Ryerson, Chicago.

Subject: "Treatment of Common Bone Injuries."

3. General interrogation upon topics covered in these two hours.

(Luncheon will be served at the City Hospital at a reasonable price.)

4. Special clinics (dry)—

1:00-2:00—

1. Skin—Gordon Underwood, Evansville.
2. Liver Treatment in Pernicious Anemia—L. G. Zerfas, Indianapolis.
3. Genito-urinary—C. E. Barnett, Fort Wayne.
4. Rabies—Thurman Rice, Indianapolis.
5. Periodic Health Examination—C. G. Beall, Fort Wayne.
6. Slit Lamp Demonstration—E. M. Shanklin, Hammond.
7. Heart—Henry A. Christian, Boston, Mass.
8. Ear, Nose and Throat—A. E. Bulson, Jr., Fort Wayne.  
Intranasal Deformities, choice of operation. Discussion of cases. Blackboard illustrations.  
C. E. Gillespie, Seymour—"The Medical Treatment of Suppurative Diseases of the Middle Ear." Blackboard and case demonstration.

The special clinics are to be held in the various operating rooms of the hospital and will take the place of the formal section meetings.

### GENERAL CLINIC

(Assembly room, City hospital. All sections meet together.)

5. 2:00-3:00—*Eye, Ear, Nose and Throat Clinic.*  
William Mithoefer, Cincinnati. Subject: "Nasal Accessory Sinuses and the General Practitioner."
6. 3:00-4:00—*Surgical Clinic.*  
W. C. Moore, Muncie and J. Y. Welborn, Evansville.
7. 4:00-5:00—*Medical Clinic.*  
Julius Hess, Chicago. Subject: "Infant Feeding and Its Present Status."
8. 5:00—Meeting of various sections to elect officers. Medical section—Main assembly room, City hospital. Surgical section—Lecture room, City hospital. Eye, Ear, Nose and Throat section—Lecture room, City hospital.
9. *Special Eye Clinic*—Dr. Robert Von Der Heydt, Chicago. Subject: "The Microscopy of the Living Eye." Lantern slide demonstration.

### BANQUET AND DANCE

Thursday Evening, September 29

(Riley room, Claypool hotel, 7:00 p. m.)

Introduction ..... President Frank W. Cregor  
Morris Fishbein, Chicago.

### GENERAL SESSION

Friday, September 30

Assembly Hall, Indianapolis City Hospital.

10. 9:30—10:30—Hugh Cabot, Ann Arbor, Michigan. Subject: "So-called Catheter Cystitis, a Misnomer."
11. 10:30—11:30—W. T. Bovie, Chicago, Illinois. Subject—"Physio-therapy."
12. 11:30—12:30—General interrogation.

### COMMITTEE ON ARRANGEMENTS

The Arrangements Committee for the coming Convention follows:

#### Executive Group

William S. Tomlin, chairman general arrangements committee.

Frank W. Cregor, president State Association.

Homer G. Hamer, president Indianapolis Society.

Wm. E. Doeppers, treasurer Indiana State Medical Association and Superintendent Indianapolis City Hospital.

Alfred Henry, chairman finance committee.

John M. Taylor, chairman entertainment committee.

C. A. Weller, chairman golf committee.

Raymond C. Beler, chairman lantern committee.

Mrs. C. F. Voyles, chairman ladies' entertainment committee.

Other members of the committee who will aid in the arrangements for the clinical material follow:

*General Medicine*—C. J. McIntire, J. P. Gauss, L. G. Zerfas.

*Abdominal Surgery*—Tom Noble, Jr., C. A. Nafe.

*Rectal*—J. W. Rickets.

*General Surgery*—L. L. Shuler, L. D. Belden.

*Gynecology*—Wm. Gabe, J. Wm. Hofman, A. S. Jaeger.

*Urology*—W. P. Garshwiler, H. O. Mertz.

*Neurology*—C. F. Neu, C. E. Cottingham.

*Obstetrics*—H. J. Weil, A. J. Micheli.

*Pediatrics*—Fred Jackson, J. C. Carter.

*Ophthalmology*—R. J. Masters, D. A. Bartley.

*Ear, Nose and Throat*—Wm. F. Molt, H. A. Van Osdol, D. F. Berry.

*Dermatology and Syphilology*—George Bowman.

### Committee on Arrangements for Women Physicians' Meeting

Jane Ketcham, chairman, Indianapolis.

Lillian Mueller, Indianapolis.

Marie Kast, Indianapolis.

### REPORT OF COMMITTEE ON CREDENTIALS

*House of Delegates, Indiana State Medical Association:*

Gentlemen:—Your committee on Credentials has the greatest part of its work to perform at or during the session, due to the fact that most of the county medical societies over the state fail in sending the proper report to the Executive Secretary of the Indiana State Medical Association in advance of the session, which doubles the amount of the committee's work at the session. We recommend that every delegate and alternate send to the Executive Secretary the proper credentials before the time of the annual session, or bring them with you, as no delegate or alternate will be seated in the House of Delegates without the proper credentials.

GEORGE D. MILLER, Chairman,

JAMES N. MCCOY,

D. E. DOUGLASS

### REPORT OF EXECUTIVE SECRETARY

*House of Delegates, Indiana State Medical Associations:*

Gentlemen:—We want to make this just as short and snappy as possible, for if we were to express here the appreciation and thanks of the state headquarters staff for the fine support, helpfulness, practical suggestions and backing that each individual physician is giving the state organization, it would take more pages than compose even this extra large-sized number of THE JOURNAL.

But we do want to take time enough to let each physician in the state know:

1. That this office desires to give increasing service to the individual physician. Sometimes we can help, sometimes we cannot do a thing, but at least we can try.

2. That your committees, as you may see from their reports, are still functioning. These are not "paper" committees, but they are real, active, working bodies always ready to undertake any duty that may be in their province in the interest of the public and the profession.

3. That this is your office and those in charge are on the job day and night for you.

In conclusion, figures show that the individual physicians of the state are regarding membership in the state Association as a necessity more and more every day. The American Medical Association directory for 1925 gave the total number of physicians in Indiana as 4251, with a total membership in the Indiana State Medical Association as 2451. The 1927 directory gave the total number of physicians in Indiana as 4164, loss of eighty-seven physicians to the state in two years. The membership in the State Association in 1927 was 2,774 or a gain of more than three hundred.

Thus, despite the fact that there are eighty-seven less physicians in Indiana today than two years ago, 329 more physicians belong to the State Association than belonged two years ago. This, we believe, is the mark of an active, growing, efficient organization.



REPORT OF PETTY CASH FUND  
Aug. 1, 1926 to Aug. 1, 1927  
RECEIPTS

Balance Aug. 1, 1926.....	\$ 267.15
Checks received from treasurer.....	1,350.00
Checks from other sources.....	144.85
Total receipts .....	\$1,762.00
EXPENDITURES	
For organization and administration work.....	\$ 691.72
For legislative work .....	409.22
For Publicity Bureau .....	409.56
For convention expenses 1926.....	153.11
Total expenses .....	\$1,663.61
Total receipts .....	\$1,762.00
Total expenditures .....	1,663.61
Balance .....	\$ 98.39

Respectfully submitted,  
THOMAS A. HENDRICKS,  
Executive Secretary.

REPORT OF TREASURER

*House of Delegates, Indiana State Medical Association*  
Gentlemen:—Our report this year will be divided into five sections. Section I will show the receipts and expenditures from August 1, 1926 to January 1, 1927. Section II will include an outline of the budget system that was inaugurated by the Budget Committee December 17, 1926. This is done so that various committees and the members of the Budget Committee may see with some degree of accuracy whether the system should be revised. This is the first year that a budget system has been in use and the committee feels that it needs more careful study. Section III will show a statement from the certified public accountant who audited our books as to the financial statements up to January 1, 1927, wherein the report speaks for itself. This is the first time that the books have been audited and the treasurer feels the Council acted wisely in granting the audit, as was suggested not only as a protection to him but to the association. Section IV of this report will show the receipts and expenditures and balance of cash on hand at the present time, also show the investments of the association, and the nature of these investments. Section V is a table showing the budget in actual operation.

A report of the finances for the balance of the year, that is from January 1, 1927 to December 31, 1927, will be submitted at the mid-winter meeting of the Council in December.

SECTION I  
RECEIPTS

<i>Investments</i>	
Certificate of deposit .....	\$15,000.00
Liberty Bonds .....	5,000.00
Total .....	\$20,000.00
Cash on hand Aug. 1, 1926.....	\$ 9,198.22
Rental on exhibit space 1926 convention.....	3,000.00
Dues of members Aug. 1 to December 31.....	217.00
Interest on Liberty Bonds Dec. 15.....	106.25
Interest on exhibit money.....	23.29
Grand total .....	\$32,544.76
EXPENDITURES	
Subscriptions to Journal, Aug. 1 to Dec. 31.....	\$ 64.00
Medical defense, attorney fees.....	200.00
Printing .....	125.86
Committee expenses:	
Secretary's committee .....	13.50
Legislative committee .....	87.00
Office expense and permanent equipment.....	610.00
Salary of executive secretary Aug. 1 to Dec. 31 .....	2,333.30
Salary of stenographers.....	1,460.00

Refund of dues.....	7.00
Expense of annual session.....	2,400.75
Total .....	\$7,301.41

Total receipts .....	\$32,544.76
Total expenditures .....	7,301.41

Bal. on hand Dec. 31, 1926.....\$25,243.35

SECTION II  
BUDGET

INCOME

2,680 members @ \$7.00.....	\$18,760.00
Exhibit .....	3,000.00
Interest on certificate of deposit and exhibit money .....	655.16
Interest on Liberty Bonds.....	212.50
Total .....	\$22,627.66

EXPENDITURES

A. EXECUTIVE SECRETARY'S OFFICE:	
1. Salary executive secretary.....	\$5,250.00
2. Salary stenographers .....	3,250.00
3. Office rent .....	900.00
4. Light .....	36.00
5. Towel service .....	19.20
6. Telephone .....	162.00
7. Office supplies and equipment .....	120.90
8. Postage .....	225.00
9. Printing membership cards, receipts and letter heads.....	175.00
10. Telegraph and long distance .....	23.50
11. Traveling expense of ex. secty .....	214.25
	\$10,375.85
B. MEDICAL DEFENSE:	
1. Attorney's fees .....	\$ 6,000.00
2. Printing .....	
3. Per diem .....	
C. PUBLICITY COMMITTEE:	
1. Clipping service .....	\$ 60.00
2. Postage .....	250.00
3. Stationery and mim supplies and envelopes .....	200.00
4. Traveling expense speakers.....	100.00
5. Printing, circulars and office supplies .....	200.00
6. Miscellaneous .....	690.00
Total .....	\$ 1,500.00
D. PUBLIC POLICY:	
1. Clipping service .....	
2. Postage .....	
3. Traveling expenses .....	
4. Printing, circulars, office supplies .....	
5. Legal aid and special assts. ....	
6. Telegraph and tolls.....	\$ 1,500.00
E. THE JOURNAL:	
1. Subscriptions .....	\$ 5,360.00
F. ALL OTHER COMMITTEES:	
1. Stationery .....	\$ 50.00
2. Med. Educ. Com. trav. exp.....	40.00
3. Scientific Committee:	
a. Speakers and guests.....	300.00
b. Committee meetings .....	100.00
4. Industrial and Civic Relations Committee .....	50.00
5. Secretary's Conference .....	100.00
	\$ 640.00
G. COUNCIL:	
1. Traveling expenses .....	
2. Expense of meetings.....	\$200.00
	\$ 200.00
H. OFFICERS:	
1. Treasurer's office:	
a. Auditing books .....	
b. Bond and Safety Box.....	\$200.00
	\$ 200.00
2. President's expense .....	
3. President-elect expense .....	

I. ANNUAL SESSION:	
1. Rent .....	\$400.00
2. Booths and signs.....	985.95
3. Programs and printing.....	150.00
4. Reporters .....	454.61
5. Clerks .....	20.00
6. Badges .....	150.19
7. Miscellaneous .....	210.00
J. CONTINGENT FUND: .....	2,500.00
K. ATTORNEY: .....	360.00
A .....	\$10,375.85
B .....	6,000.00
C .....	1,500.00
D .....	1,500.00
E .....	5,360.00
F .....	640.00
G .....	200.00
H .....	200.00
I .....	2,370.00
J .....	2,500.00
K .....	360.00

Budget total .....	\$31,005.85
Income (estimated 1927).....	\$22,627.66
Balances in bank:	
Meyer-Kiser Bank .....	\$ 2,220.06
Bankers Trust, petty cash.....	277.75
Total .....	\$25,125.47
Total of income estimated and bank balances	\$25,125.47
Certificate of deposit .....	15,000.00
Liberty Bonds .....	5,000.00
Grand total .....	\$45,125.47
Budget appropriation .....	31,005.85

Money not appropriated.....\$14,119.62  
\*The amount allowed for the Public Policy Committee was found inadequate and the Budget Committee appropriated \$958.25 additional to take care of bills incurred during the legislature.

SECTION III

January 21, 1927.

Wm. A. Doeppers, M. D.:  
I have made a detailed audit of the books of the Indiana State Medical Association and hereby certify that the accounts on the books reflect the attached statement of income and expenses for the year ending December 31, 1926.

R. E. WELCH

INDIANA STATE MEDICAL ASSOCIATION

*Application of Funds for the Twelve Months Period Ending December 31, 1926*

INCOME	
2,685 members' dues @ \$7.00.....	\$18,797.00
Income from exhibits.....	3,023.29
Interest on Liberty Bonds.....	212.50
Total .....	\$22,032.79

EXPENSES	
Secretary's office .....	\$ 8,334.92
Medical defense .....	200.00
Treasurer's office .....	59.00
Journal .....	5,364.00
Council .....	175.31
Printing .....	439.72
Committees .....	565.12
Permanent equipment .....	1,883.39

Annual Session .....	2,400.75
Miscellaneous .....	14.00
Total expenditures .....	\$19,436.21
Net income for 1926.....	\$ 2,596.58
Surplus at January 1, 1926.....	22,646.77
Surplus at December 31, 1926.....	\$25,243.35

ANALYSIS OF SURPLUS ACCOUNT

DECEMBER 31, 1926

Certificate of Deposit with Meyer-Kiser bank	\$15,000.00
Liberty Bonds .....	5,000.00
Deposited in the Bankers Trust Company.....	3,023.29
Checking acct balance in the Meyer-Kiser bank at December 31, 1926.....	2,220.06
Total .....	\$25,243.35

SECTION IV

In the period January 1, 1927 to August 1, 1927, receipts and expenditures were made as follows:

RECEIPTS

Cash on hand January 1, 1927.....	\$ 2,220.06
Dues for memberships (2632 members) .....	18,427.00
Check to reimburse legislative fund .....	25.28
Interest on Liberty Bonds.....	106.25
Interest on Certificate of deposit .....	1,012.50
Total .....	\$21,791.09

EXPENDITURES

Executive Secretary's office.....	\$ 5,365.24
Publicity Committee .....	245.60
Public Policy and Legislation.....	2,507.78
JOURNAL .....	5,248.00
Council .....	197.41
Treasurer .....	186.50
Annual Session, 1927.....	141.95
Committee on Medical Education and Hospitals .....	39.87
Program Committee, traveling exp	15.95
Stationery for Miscellaneous Committees .....	13.50
Attorney for year 1927.....	300.00
Secty. Madison Co. Med. Society, overpayment .....	3.00
Medical Defense Expense .....	475.00
Contingent fund .....	2,500.00

Total expenditures .....	\$17,239.80
Net income for Aug. 1, 1927.....	\$ 4,551.29
Surplus at Jan. 1, 1927.....	3,023.29
Surplus at Aug. 1, 1927.....	60.24
Total .....	\$ 7,634.82

ANALYSIS OF SURPLUS ACCOUNT AT

AUGUST 1, 1927

Certificate of Deposit with Meyer-Kiser bank	\$15,000.00
Liberty Bonds .....	5,000.00
Account in Bankers Trust Company.....	3,083.53
Checking Account Balance in Meyer-Kiser bank at August 1, 1927.....	4,551.29
Total .....	\$27,634.82

Respectfully submitted,  
WILLIAM A. DOEPPERS,  
Treasurer.



## SECTION V

## BUDGET OF STATE MEDICAL ASSOCIATION

Mo.	Executive Office	Med. Def.	Pub. Com.	Legisla. Com.	Journal	Other Com.	Council	Officers	Ann. Session	Atty.
Jan.	Appro. \$10,375.85	\$6,000.00	\$1,500.00	\$2,200.00	\$5,360.00	\$640.00	\$200.00	\$200.00	\$2,370.75	\$360.00
	Exp. 908.92	100.00	68.01	175.39	3,626.00	-----	197.41	183.50	4.50	-----
	Bal. \$9,466.93	\$5,900.00	\$1,431.99	\$2,024.61	\$1,734.00	\$640.00	\$ 2.59	\$ 16.50	\$2,366.25	\$ 0.00
Feb.	Appro. \$9,466.93	\$5,900.00	\$1,431.99	\$2,024.61	\$1,734.00	\$640.00	\$ 2.59	\$ 16.50	\$2,366.25	\$360.00
	Exp. 711.10	225.00	8.25	388.12	764.00	13.50	-----	2.50	-----	-----
	Bal. \$8,755.83	\$5,675.00	\$1,423.74	\$1,636.49	\$ 970.00	\$626.50	\$ 2.59	\$ 14.00	\$2,366.25	\$360.00
Mar.	Appro. \$8,755.83	\$5,675.00	\$1,423.74	\$1,636.49	\$ 970.00	\$626.50	\$ 2.59	\$ 14.00	\$2,366.25	\$360.00
	Exp. 729.67	-----	15.00	1,580.64	298.00	39.87	-----	3.00	-----	33.33
	Bal. \$8,026.16	\$5,675.00	\$1,408.74	\$ 55.85	\$ 672.00	\$586.63	\$ 2.59	\$ 11.00	\$2,366.25	\$326.67
			Cr. 25.28							
				\$ 81.13						
Apr.	Appro. \$8,026.16	\$5,675.00	\$1,408.74	\$ 81.13	\$ 672.00	\$586.63	\$ 2.59	\$ 11.00	\$2,366.25	\$326.67
	Exp. 790.61	50.00	50.50	76.84	338.00	-----	-----	-----	-----	266.67
	Bal. \$7,235.55	\$5,625.00	\$1,358.24	\$ 4.29	\$ 334.00	-----	\$ 2.59	\$ 11.00	\$2,366.25	\$ 60.00
May	Appro. \$7,235.55	\$5,625.00	\$1,358.24	\$ 4.29	\$ 334.00	\$586.63	\$ 2.59	\$ 11.00	\$2,366.25	\$ 60.00
	Exp. 831.90	-----	4.50	-----	122.00	-----	-----	-----	-----	-----
	Bal. \$6,403.65	\$5,625.00	\$1,353.74	\$ 4.29	\$ 212.00	\$586.63	\$ 2.59	\$ 11.00	\$2,366.25	\$ 60.00
			Cr. 258.25							
June	Appro. \$6,403.65	\$5,625.00	\$1,353.74	\$ 262.54	\$ 212.00	\$586.63	\$ 2.59	\$ 11.00	\$2,366.25	\$ 60.00
	Exp. 774.33	100.00	36.45	262.54	58.00	15.95	-----	-----	137.45	-----
	Bal. \$5,629.32	\$5,525.00	\$1,317.29	\$ 0.00	\$ 154.00	\$570.68	\$ 2.59	\$ 11.00	\$2,228.80	\$ 60.00
July	Appro. \$5,629.32	\$5,525.00	\$1,317.29	-----	\$ 154.00	\$570.68	\$ 2.59	\$ 11.00	\$2,228.80	\$ 60.00
	Exp. 750.30	-----	54.29	-----	100.00	-----	-----	-----	-----	-----
	Bal. \$4,879.02	\$5,525.00	\$1,263.00	-----	\$ 54.00	\$570.68	\$ 2.59	\$ 11.00	\$2,228.80	\$ 60.00
Aug.	Appro. \$4,879.02	\$5,525.00	\$1,263.00	-----	\$ 54.00	\$570.68	\$ 2.59	\$ 11.00	\$2,228.80	\$ 60.00

## REPORT OF THE CHAIRMAN OF THE COUNCIL

*House of Delegates, Indiana State Medical Association*

Gentlemen:—The essential acts of the Council during the past year are summarized as follows:

FIRST MEETING, WEST BADEN, INDIANA, SEPTEMBER 22, 1926.

The roll call showed twelve of the thirteen councilors present along with the president of the Association, editor of THE JOURNAL and the executive secretary. Every district was represented except the tenth. The short reports made by each councilor showed that the State Association is functioning well.

The reports of the Research Committee and the committee on parents and physicians' certificates of the Indiana High School Athletic Association were read before the Council. The Council complimented the thorough work of these committees and re-asserted its desire to co-operate with the Indiana High School Athletic Association at all times.

The secretary presented answers to questionnaires sent to various state associations in regard to post-graduate work. These were referred to the House of Delegates and in turn referred to the chairman of the Post-graduate Study Committee.

The bulletin of the Indiana State Health Council published by the Extension Division of Indiana University was presented each member of the Council.

Letter was read from the American Medical Association in regard to the situation in Warren county and the councilor for the ninth district reported the results of his investigation in that county.

The executive secretary made a financial report of the exhibitors showing there were forty-eight booths in the exhibit occupied by forty-two exhibitors.

Letter received from physicians of Harrison county in regard to organization and the councilor for the third district in which Harrison county is located was requested to make an investigation and report upon this matter at the mid-winter meeting.

SECOND MEETING, WEST BADEN, SEPTEMBER 24, 1926.

Ten councilors were present representing all districts except second, ninth and twelfth. Charles N. Combs,

retiring president of the State Association, Frank W. Gregor, president-elect for 1927, editor of THE JOURNAL and the executive secretary were present.

The Council failed to pass a resolution providing for the publication of a delinquent list in THE JOURNAL.

The membership report showed there had been an increase during the year of eighty-seven members, the present membership being 2,672 members in good standing.

The Council expressed vigorous opposition to the action of certain persons in going before the State Board of Education and asking that parts of the physiology textbooks now in use in elementary schools be deleted. According to the newspapers, attorneys representing unnamed clients appeared before the State Board of Education objecting to those parts of the book which have to do with disease and disease symptoms.

MID-WINTER MEETING OF THE COUNCIL, DECEMBER 17, 1926, INDIANAPOLIS.

All members of the Council were present except the second and twelfth district. Charles N. Combs, retiring president, Frank W. Gregor, president-elect for 1927 and George R. Daniels, president-elect for 1928, William A. Doeppers, editor of THE JOURNAL and the executive secretary were also present.

More business came before the meeting of the Council at this session than at any other Council meeting in recent years. As a result, the meeting was called to order at 10:15 a. m. and continued in session until late in the afternoon.

Report of the councilors by districts showed every district in good condition and all but a few counties actively at work.

Several districts reported splendid results from tri-county organizations.

Charles N. Combs, retiring president of the State Association, made a talk before the Council, mentioning the three big outstanding features of the year as follows:

1. Adoption of the new Constitution and By-Laws, bringing the code under which the Association is functioning up-to-date.
2. The institution of the secretaries' conference.
3. The establishment of the budget plan.

Dr. William A. Doeppers, treasurer, made a report showing that the Association had \$25,874.72 in the bank. The employment of an auditor to review the books and to help get the new budget system established was authorized.

Dr. Albert E. Bulson, editor of THE JOURNAL, in his report stressed the need of increasing the interest of the profession in the periodic health examination movement, and urged the Association to co-operate in every way possible with the State Board of Health in the diphtheria immunization campaign.

The Council discussed at length the need of a change in the general scientific program at the annual session. The general feeling expressed was that "scientific papers should not be too highly technical and we should have more general meetings."

Dr. William A. Doeppers extended an informal invitation from the City Board of Health to use the City Hospital in any way it desired in conducting post-graduate work and clinics during the state session.

The subject of periodic health examinations came before the Council and the report showed that Indiana stands well up in line in this work along with other states.

Drs. David Ross and A. L. Marshall were elected as members of the Executive Committee for 1927.

The Council heard reports from the following chairmen:

Frank S. Crockett, chairman, Industrial and Civic Relations Committee.

David Ross, chairman, Executive Committee.

Frank W. Cregor, chairman, Legislative and Public Policy Committee.

E. E. Padgett, chairman, Program Committee.

E. O. Harrold, chairman, Secretaries' Committee.

James H. Stygall, chairman, Diphtheria Committee.

Dr. Cregor introduced E. R. Zimmerman, chairman of the legislative committee for 1927.

Dr. William F. King, secretary of the State Board of Health, spoke before the Council upon the diphtheria immunization campaign.

The Council authorized the awarding of a charter to the physicians of Harrison county.

Dr. William R. Davidson was re-elected chairman of the Council.

Respectfully submitted,

WILLIAM R. DAVIDSON,  
Chairman of the Council.

## REPORT OF THE EXECUTIVE COMMITTEE

### *House of Delegates and the Council of the Indiana State Medical Association*

Gentlemen:—With the definite duties of the Executive Committee laid down by the new Constitution and By-Laws of the Association, which were adopted at the West Baden session, this year for the first time your Executive Committee was sure of its powers and limitations. Following closely the new constitution, your committee is making its annual report as required, to the Council and to the House of Delegates. This, we believe, is the only committee which is required to make this double report. In order to save time, the two reports are made in one.

Following the official appointment of the members of the Executive Committee by the Council at the mid-winter meeting of the Council, the committee held an organization meeting on February 3, 1927, at which A. L. Marshall, of Indianapolis, was elected chairman. From the date of its organization, the committee functioned regularly throughout the year, holding regular monthly meetings at the headquarters office as provided by the new constitution.

At these meetings, the Executive Committee functioned along two lines:

(1) As representative of the Council of the State

Association during the intervals between meetings of that body;

(2) As a committee on Medical Defense.

Acting as representative of the Council, the Committee functioned as follows:

(1) Checked the work of the executive office from month to month;

(2) Outlined policies and received suggestions concerning work that was necessary for the welfare of the Association and conduct of the executive secretary's office. It is regretted that we never have had a full committee meeting. With the small majority which the committee has had at most of its meetings, the members have discussed but have been reluctant to take definite action in many matters of considerable importance. Complete harmony has existed between the committee and the Council.

(3) Checked over all bills of all committees, calling the attention of the Budget Committee to the necessity of additional funds when the money allowed for the work of any one particular committee was exhausted. Medical defense bills and all bills of the Association are placed before the committee at its meeting each month. This does not include fixed bills such as salary of executive secretary and members of the office force and subscriptions to THE JOURNAL.

(4) Published a pamphlet entitled—"What the Indiana State Medical Association is Doing," and through the executive office distributed this pamphlet to ethical practicing physicians in the state of Indiana who are eligible to membership in their county society and the state association but had not become members. Your committee urges that the secretaries of the various county societies obtain these pamphlets and make use of them among prospective members in their various communities.

*Medical Defense Activities.* It is with sincere pleasure that your executive committee reports that members of the Indiana State Medical Association are receiving their medical defense protection cheaper than physicians in any other state. Seventy-five cents of the annual dues go to medical defense. In some other states the sum for medical defense is as high as \$10 for each individual physician. These figures are gained from the annual report made by the Bureau of Legal Medicine and Legislation of the American Medical Association, which has compiled data upon medical defense from all state associations. Not only is medical defense cheaper in Indiana, but under the Indiana system, the medical defense feature of our society is functioning with absolute efficiency. Not a single physician who is a member in the state association as required by the Constitution and By-Laws upon Medical Defense, and whose case is a legitimate one, has failed to receive defense from the state society.

During the year, August 1, 1926 to August 1, 1927, seven applications for medical defense have been sent out upon request of members of the Association. Of this number five have been returned filled out by the applicants and their defense is being undertaken by the committee. Two applications have not yet been returned.

A year ago at the time of the report, August 1, 1926, the following 24 cases were pending before the committee and the committee reports the following progress of these 24 cases:

- No. 107 Suit never brought, just threatened. Defendant says case may be dropped.
- " 109 Pending October, 1925. No action taken by plaintiff since time case was filed.
- " 120 Suit in this case never filed. Word case had been dropped was received June 10, 1927.
- " 122 Pending. Attorney for physician thinks case will be dropped eventually.
- " 123 Pending. Case held up on demurr.
- " 125 Jury returned a verdict for plaintiff and damages for \$1500 in May, 1926. Case was appealed by defendant to Appellate Court 1927. Appeal pending.



- " 126 Pending. Probably will not be brought to trial because of illness of defendant. Case probably will be dropped.
- " 127 Tried 1925, jury disagreed. Retried. Plaintiff secured verdict for \$2500. Appeal pending.
- " 128 Pending. Think case will be dropped soon.
- " 130 Pending.
- " 134 Suit threatened but not filed.
- " 135 Case dismissed December 9, 1926; attorney fees \$50.00.
- " 136 No suit filed. Statute of limitation expired July 16, 1927.
- " 137 Case dismissed May 4, 1927. Cost \$200.
- " 138 Tried January 10, 1927. Verdict for defendant. Cost \$225.
- " 139 Application blank not returned.
- " 140 Pending.
- " 141 Pending.
- " 142 Pending.
- " 143 Pending.
- " 144 Judge dismissed case December 18, 1926. Cost \$100.
- " 145 Case probably has been dropped.
- " 146 Suit threatened. Statute of limitations expired August 10, 1927.
- " 147 Suit dropped for want of an attorney.

Since August 1, 1926, to August 1, 1927, the following new cases came before the committee:

- No. 148 Application blank not returned. Case reported dropped.
- " 149 Application blank not returned. No suit filed. Physician reports case can be dropped.
- " 150 Suit filed September 20, 1926. Case pending.
- " 151 Suit filed, case pending. Trial set for September 5, 1927.
- " 152 Case in Appellate Court. Cost \$100.
- " 153 Suit pending.
- " 154 Suit pending May, 1927.

Total cost of medical defense for the year \$675.

A report of the financial condition of the medical defense fund is contained in the treasurer's report.

#### *Suggestions for the Future:*

In order that the Executive Committee may be assured of a quorum at its meeting each month, your committee suggests that three members reside in Indianapolis or within immediate reaching distance of that city.

Your committee also recommends that the by-laws creating the committee can be amended to state definitely the terms of office of each committeeman who is appointed by the Council.

Respectfully submitted,  
A. L. MARSHALL, Chairman,  
DAVID ROSS,  
FRANK W. CREGOR,  
W. R. DAVIDSON,  
A. E. BULSON, JR.

### REPORT OF THE COMMITTEE ON PUBLIC POLICY AND LEGISLATION

*House of Delegates, Indiana State Medical Association:*  
Gentlemen:

The report of your committee, which appeared in the April number of THE JOURNAL, gives a detailed review of the work of the committee during the 1927 session of the legislature. The principal achievement of the committee has been the adoption of an amendment making the present medical practice act enforceable. This amendment carries an injunction clause against unlicensed practitioners, provides for the licensing of drugless healers who were established in Indiana on January 1, 1927, places a drugless healer upon the State Board of Medical Registration and Examination, and provides that in the future all those who obtain a license to heal,

diagnose or treat human disease by whatever method, shall be qualified in the basic sciences.

The amendment had become a part of the medical practice act only a few months when the need of such regulatory legislation was plainly shown by the now famous Briggs Diploma Mill Expose made by Walter Shead, a feature writer for the *Indianapolis News*.

Immediately following the exposure of this drugless healing diploma mill, the *Indianapolis Star* and papers of the state carried editorials along the following lines:

"The attempt of the last legislature to strengthen the medical law did not achieve all that the public interest required, but it did mark a step toward stricter regulation. Its effect was sufficiently evident to compel the 'dean' operating the diploma mill to pre-date and 'age' diplomas in the hope of deceiving the state licensing board. The present case should strengthen the hand of the authorities by stripping the fraudulent practitioners of the cloak of martyrdom they have used with some success in cheating the law. There should be no room anywhere in Indiana for the diploma mill 'graduate'."

The *Indianapolis News* in an editorial says:

"The arrest of Briggs should not close the investigation. The State Board of Medical Examination and Registration should insist that every diploma that may be questionable in the slightest degree be traced and the standing of its holder determined. The new law was not intended to prevent the practice of the healing art by those who know what they are doing, but it was aimed at quacks and fakirs. It ought to be enforced to the letter."

The State Board of Medical Examination and Registration is doing this very thing and your committee wishes to express its unlimited confidence in the judgment and fairness of the Board which will be in charge of the administration of the new provisions of the law.

Although the profession is acquainted with the heated struggle to pass the Huffman Bill, we again wish to take the opportunity of thanking the individual physicians and friends of the medical profession among the laity who came to Indianapolis during the session of the legislature and helped carry on the fight which could not have been other than unsuccessful without their support. We also wish once again to thank all our friends in the General Assembly who despite the clamor of selfish interests helped amend the medical practice act so it might be enforceable.

Realizing that forces contending against the medical profession and against the public health and welfare are strongly organized and very active, your committee makes a plea for unity of the medical profession of Indiana made up of more than four thousand physicians. By this means and this means only will the individual physician be a political force in Indiana. By a political force your committee does not mean that the medical profession should ever enter partisan politics, but it does mean that it hopes the profession always will be a forceful, active, co-ordinated body, ready to fight to the end in the interest of public health. In fact, our one reason for continuing the work is due to a sincere wish that the public be protected from incompetents and ignorance in the practice of the healing art.

J. B. Jackson, M.D., president of the Michigan State Medical Society, has said—"The medical profession has fought and won its fight against typhoid fever, yellow fever, malaria, and many other former scourges of humanity. In the same spirit we are now fighting against incompetents in the practice of the healing art. It seems best to continue our efforts to insist that every practitioner of the healing art shall be held to standards of education somewhere near that maintained by medical men. Other states, Wisconsin, Connecticut, Nebraska, Indiana, Minnesota and New York have led the way and I believe it is time for Michigan to fall in line."

Suggestions for the Future

For the purpose of unifying our organization, your committee begs leave to make the following suggestions for the future:

1. *Maintenance of state wide, district and county unit organizations.* The State Medical Association should maintain an efficient state-wide organization with a central state legislative committee on the job day and night during each legislative session.
2. *Pre-campaign Work.* Work should start before the primaries. A legislative committee should be appointed in each county medical society for 1928. These committees should be prepared to co-operate with the committees of their district and with the state association.
3. *District Meetings.* Legislative meetings should be held in every councilor district in 1928 similar to the ones that were held during the summer and fall of 1926.
4. *Co-operation with the State Board of Medical Registration and Examination.* Each individual physician should co-operate to the best of his ability with the State Board of Medical Registration and Examination with a view that the new provisions of the law be enforced.
5. *Cultists Active.* We should be prepared to meet the attacks of the cultists who will battle actively to break down the barriers which safe-guard the public health with a flood of incompetent healers. Even now in the face of the Briggs expose, these various cults are preparing bills to be presented at the next legislature for the creation of separate drugless healing boards.
6. *Invite your Politicians.* Set aside one meeting of your county medical society this year, invite your representatives and senators to come meet you and address you.
7. *Know the attitude of your Legislators toward public health.* The attitude toward public health legislation of each legislative candidate in the district should be known previous to the primaries.

8. Each individual physician should realize that in considering a solution of this problem that these matters appear differently according to the point of view from which they are seen. A trained physician sees these irregular, short-term practitioners as an uneducated and incompetent class who are lowering the standards of practice. The public and members of the legislature too often consider the physician as fighting the cultists from a motive of self-interest. If we are to continue our fight against incompetents who practice the healing art, we must bring a solution that will have an appeal to fairness and justice to all.

EXPENSES OF THE LEGISLATIVE COMMITTEE	
August 1, 1926, to December 31, 1926	
Postage .....	\$ 64.00
Traveling expense secretary and president.....	152.60
Telegraph .....	3.87
Total .....	\$ 220.47
January 1, 1927, to August 1, 1927	
Postage .....	\$ 111.50
Traveling expense secretary and president ..	36.05
Telegraph and telephone .....	173.60
Mimeograph supplies .....	5.50
Paper and stationery .....	67.75
Broadcasting .....	30.00
Clipping service .....	60.27
Addressograph stencils .....	8.24
Traveling expense and hotel bills, legislative committee and members of the association called to Indianapolis during session of legislature .....	1990.62

Total .....	\$2483.53
Budget Committee allowed for 1927 .....	\$2458.25
Ck to reimburse legislative fund.....	25.28
Total .....	\$2483.53
Total expense to Aug. 1, 1927 .....	2483.53

Bal. in legislative fund .....	
Total expense Aug. 1, 1926 to Dec. 31, 1926.....	\$ 220.47
Total expense Jan. 1, 1927 to Aug 1, 1927.....	2483.53
Total expense Aug. 1, 1926 to Aug. 1, 1927.....	\$2704.00
Respectfully submitted,	
E. R. ZIMMERMAN, Chairman,	
LOUIS E. FRITSCH,	
O. T. SCAMAHORN.	

REPORT OF THE COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

House of Delegates, Indiana State Medical Association:  
Gentlemen:

The first quarter of this century has witnessed an amazing change in Medical Education. From a condition quite disreputable, in which we had in America about half the number of medical schools of the world, we, in two decades, cut the number in half and greatly improved the quality of those remaining. As a result of the increase of entrance requirements to two years of collegiate work, there was a decrease of fifty per cent in the number of medical students up to 1919. But since the number of schools had been reduced fifty per cent, the average teaching load per school remained the same. Since 1919 there has been an increase in total Medical School enrollment of about one thousand per year. In all this revolutionary change Indiana has participated and the Indiana University School of Medicine has shared.

Nineteen years ago last May the consolidation of all the Medical Schools of Indiana occurred. The Freshman and total enrollments for each year since the union of all schools in May, 1908, are as follows:

Enrollment of the Indiana University School of Medicine			Total Enrollment of United States
Year	Freshman	Total	Total
1908-09	69	270	
1909-10	67	237	21526
1910-11	26	185	19786
1911-12	35	155	18412
1912-13	42	147	17015
1913-14	45	133	16502
1914-15	50	152	14891
1915-16	47	156	14012
1916-17	68	175	13764
1917-18	81	213	13630
1918-19	43	200	12930
1919-20	80	230	13798
1920-21	88	244	14466
1921-22	112	266	15635
1922-23	108	327	16960
1923-24	105	346	17728
1924-25	117	379	18200
1925-26	116	376	18840
1926-27	111	402	

The sharp break in 1910 was due to the requirement of one year of collegiate work followed in 1911 by two years of collegiate work for matriculation in the Indiana University School of Medicine. The low Freshman enrollment in 1918-19 was due to the war year, and, corresponds with the low total for the United States. In the year ending June, 1926, we were sixteenth in point of total enrollment and fifteenth in point of Freshman enrollment among the Medical Schools of the United States. It is evident, therefore, we are carrying a load corresponding well with that of the most popular schools



of America. The returns for 1927 will probably be still more favorable.

In spite of heavy enrollments, limited more and more to Indiana students, we are embarrassed by ever increasing enrollments. This year our class was practically filled on May 15th. More than four hundred applied for a place in our Freshman Class which may not fairly exceed 115, and some few hundred have applied for advanced standing, not one of whom were accepted. The policy of limiting enrollments largely to Indiana boys has been criticized by some of the best educational and political minds of the state. They contend that the prime purpose of the State supported School of Medicine is not to give Indiana boys a chance to learn a profession but to train high grade Doctors of Medicine for the protection of the health and lives of Indiana citizens.

The MEDICAL BULLETIN for the past year and for many years past shows where each man of the preceding year is serving his internship. It will be observed that of the class graduated in 1926, thirty-five served internships outside Indiana, from Boston to California, and beyond our borders, in the Canal Zone and China. Of those who go into far states or countries for their internship, some never return, but locate permanently in some out of state place. On the other hand, of those who came to us from other states for a medical education, a goodly number marry and locate in the old Hoosier state. From the standpoint of serving the people of Indiana by producing high grade Doctors of Medicine to protect the lives and health of our citizens, there seems to be no justification of a policy that would turn down a superior man from another state in favor of a mediocre man from Indiana. To do so, as one keen observer remarked, would soon give us a school of merely local attendance and interest which would soon cease to be attractive for Hoosier boys if they found it was not drawing from other states. While it seems wise to continue accepting a few superior men from other states, we shall continue our policy of requiring a higher minimum scholarship attainment and higher fees from the out of state boy.

With the voting of the building program for the institutions of higher education by the last Legislature a brighter day dawns for higher education in general in which it is expected medicine will share. On the clinical side great strides have been made in the past nineteen years. Nearly five million dollars have been supplied from private sources for clinical medicine and we are rapidly developing one of the great medical plants of the world.

Dr. B. D. Myers, Chairman of the Committee on Medical Education and Hospitals, attended the meeting of the Annual Congress on Medical Education, Medical Licensure and Hospitals held in Chicago, February 14, 15, 16, 1927. Some two hundred of the leaders of the American Medical Association, particularly as affecting Medical Education were present.

Much of the report of that meeting has already been printed in the Journal of the A. M. A. but emphasis should be laid on the address of the Chairman, Dr. Arthur Dean Bevan, on the teaching of Medical Ethics. Among other things he said, ninety-nine prescriptions out of one hundred written for a pint of whiskey are bootleg prescriptions and a disgrace to the great medical profession."

On the division of fees he said, "The medical man who deceives his patients by some scheme of division of fees might just as well pick his patient's pocket. Such evils should be attacked without sensationalism and without publicity." Dr. Bevan quoted from Hippocrates: "Into whatever home I enter, I will enter for the good of my patient."

Dr. Franklin C. McLain, Professor of Medicine, University of Chicago, said, "Only in science is the salvation of medicine."

Dr. Charles F. Martin of McGill University, President of the Association of American Medical Colleges, said, "In the last analysis, it is the product of the school which is the most critical factor in its classification."

Dr. Ray Lyman Wilbur, president of Stanford University, said, "It is not what we know but what we can actually use that counts in medical practice." He urges the full calendar year for medical instruction.

Dr. William J. Mayo of Rochester, Minnesota, said, "Many men of wide knowledge have little wisdom. Many men of great wisdom have little knowledge but they derive efficiency from the fine use they make of what they know. Today we devote too much time to driving home detailed information and too little time to developing perspective. We should teach the student how to think and where to look for information." "He who learns and learns, yet does not what he knows, is like one who plows and plows, yet never sows."

Dr. Willard C. Rappleye, director of a great survey of medical education now being made, prophesied that in 1955 the number of doctors in the United States will be lowest. There is now one doctor to eight hundred and ninety-one people. There will be then but one doctor to thirteen hundred people.

The Tuesday session opened with a paper by Dr. Frank B. Granger, physician-in-chief for Physical Therapy, Boston City Hospital. He stated the cost of the equipment for a Department of Physical Therapy (including Massage, Electrotherapy, Hydrotherapy and Mechanotherapy, is about \$15,000. Installation should begin with minimum equipment needed unless some benefactor desires to install full equipment. The space utilized is usually a basement. Four separate rooms will make possible the care of 40 or 50 patients per day. The floors should be of linoleum or insulite, the baths tiled. Plugs should be different for different currents so it would be impossible to plug in a direct current on an alternating current apparatus.

Dr. N. P. Colwell, secretary of the Council on Medical Education and Hospitals, gave the last paper of the Tuesday A. M. session, on the Hospital Function in Graduate Medical Education. He said:

"In the announcement of only one Medical School is there any hint of hospital instruction as early as 1840 in any way resembling modern ward walks or bedside instruction. Only after three or four-year medical school had been established that relation between medical school and hospital began to be established. Chiefly demonstration.

"In 1906-07, 63 of the 162 medical schools had no hospital connection whatever. Thirty-one had occasional clinics, mostly surgical. Fifty-seven had hospital amphitheatre clinics. Five had hospital ward walks. Six had hospital privileges wherein students could write histories and care for and examine ward patients.

In 1908 access to hospital and control of teaching material was made one of the essentials of acceptable medical schools.

In 1913, of 4,000 hospitals then existing only 852, 20 per cent were at all interested in internes. Of these, 508 were included in Council's first list published in 1914, as guide for students seeking internships. These hospitals had 88,000 beds and 2,667 internes. There were 3,981 graduates in 1913.

"With the introduction of two premedical years demand for internes soon became so large that there were not enough graduates to meet the demand, due in part to better training of medical students and in part to the great increase in the number of and capacity of hospitals.

"By 1925 there were 7,370 hospitals with 813,926 beds.

"At the present time there are 317 hospitals more or less related to medical schools in the training of physicians.



There are 49 hospitals owned and controlled by medical schools. There are 37 hospitals in which the separately owned, entire clinical material is controlled by medical schools for teaching.

"Forty hospitals, generous use of medical school teaching. Eighty-two hospitals are adjoining or close to medical schools.

"Today there are two internships to each graduate.

"Today there are 575 hospitals with 132,037 beds, providing for 3,825 internes, on Council's approved list.

"The increase in number over 1914 is small but represents a great improvement from the standpoint of education and efficiency.

"In many hospitals house physicians employed at various stipends, usually those hospitals not able to obtain internes.

"All contributes to better diagnoses and treatment.

"RESIDENCES: Up to 1922 little attention was paid to number of hospitals providing residences.

"In 1925, 50 hospitals approved as providing satisfactory residences. In 1926 the number increased to 284.

"GRADUATE MEDICAL SCHOOLS: In 1922 the Principles of Graduate Medical Schools was published. Today 41 schools in the United States in which acceptable courses in graduate medical instruction may be obtained. Nineteen institutions abroad.

"The hospital has reached a higher point in its development than ever before and renders a greater service to sick and injured humanity. In no place is a patient more certain to secure intelligent and skilled treatment.

"A hospital's threefold function is to:

1. Provide care of its patients.
2. Training of nurses, medical students, internes, and physicians.
3. Adding its contribution to the rapidly accumulating knowledge regarding cause, prevention and cure of disease.

"Each is best fulfilled only when two are equally well performed.

"Hospitals should further develop through stimulation of active research in each institution."

Dr. Walter L. Bierring, secretary-treasurer, Federation of State Medical Board of the United States, opened the afternoon session discussing the Teaching Value of Post Graduate Clinics and Programs.

He was followed by Dr. Charles A. Gordon, chairman of the Committee on Public Health and Medical Education of the New York State Medical Society, on "Taking Medical Education to the Practitioner." He stated that the Medical Society of the State of New York is offering graduate education without cost to every physician in the State, whether members of the County Society or not. There are no fees and no County Society has contributed funds for the work. The cost is met entirely by the State Medical Society and State Department of Health, which has borne most of the cost of lectures in obstetrics and pediatrics. The work is in its second year. Have reached 51 of 62 counties of the State. Twenty-six counties, pediatrics; 23 counties, obstetrics; 11 both; 15 other courses, Gast. Intest. diseases, General Medicine, Cardiac diseases. Lectures for the most part from one to two hours same day of week for six weeks.

In one course four counties meet at a central point. The work of the organization is in the hands of a Committee on Public Health and Medical Education. The County Society agrees to secure satisfactory attendance and provide clinical material. It does not supplant but supplements county meetings. They follow the plan of lectures which has attained such success in Brooklyn and is known as the "Brooklyn Idea." Only tried teachers lecture on subjects selected by the committee. Five-six lectures. Its purpose is not to make specialists but to improve standards of practice.

Medical education is not purely a medical problem.

Everyone participates in the dividends of modern medicine.

In the continuous education of the practicing physician we see the greatest single contribution medicine can make in the solution of the great problems of public health and responsibility rests not upon the medical college but on us.

Summary:

1. The Medical Society of the State of New York is carrying stimulation, encouragement and some form of graduate medical education to those who are unable to leave their homes.

2. Do not expect to train specialists but hope to raise the local standard of practice.

3. Comprehensive courses in laboratory sciences not included in plans because we believe the majority of diseased conditions yield to clinical diagnosis, which is still the most important factor in clinical medicine.

4. Believe plan can be carried out in any community where there is a hospital and men willing and able to teach.

5. Best results attained through alliance with the medical schools.

6. Responsibility for graduate medical education rests upon organized medicine.

Dr. Louis B. Wilson, director of the Mayo Foundation, closed the session with a discussion of Graduate Medical Education in Europe in 1926, based on his personal inspection.

He found that splendid research was going on under adverse conditions, especially in Vienna. The necessity of caring for increased enrollments following the war has cut in on investigative time and work. National antipathies would not handicap a serious-minded American in any of the 25 medical centers visited. However, the necessity of going to Europe for inspiration and opportunity has passed in every department of Medicine.

In Bio-chemistry and Anatomy the opportunity is supreme in America. In Pathology, Dermatology and Orthopedics there are splendid opportunities in Europe. Opportunities in Physiology are equally good in Europe and America. There are a number of European medical centers with 800 to 4,000 autopsies per year.

Tropical medicine is better developed in Europe than in America, and Dermatology likewise.

Orthopedics is better developed in Europe, since the man entering this field commonly spends three or four years in anatomy as a foundation for his work. The student who does not understand foreign languages, desiring to go to Europe, had better go to England. Wherever he goes he should carry references.

All told, the meeting was very worthwhile in that it shows modern trends in medical education and helps in crystallizing views on a number of important problems in Medical Education in Indiana.

Respectfully submitted,

BURTON D. MEYERS, Chairman.

WALTER MCFADDEN,

S. E. EARP.

## REPORT OF COMMITTEE ON INDUSTRIAL AND CIVIC RELATIONS

*House of Delegates, Indiana State Medical Association:*

Gentlemen:—Your committee has continued, during this year, to act as arbiter in industrial cases where the insurance carrier and the attending physician found direct solution of their problems impossible. The fees charged in cases of injury occurring in industry, have been the chief cause of disagreement.

During the preceding two years, your committee collected a large mass of information from employers, insurance carriers, employees as represented by organized labor, and from physicians over the state. This mass of information dealt with the operation of the industrial law, in so far as it affected physicians and the remuneration allowed them for their services in cases of injury to



the employee.

An effort was made to establish such remuneration on the basis of fees current in the community where service was rendered or in communities comparable to the one in which service was rendered. Last year and this year your committee acted as arbiter in a number of cases where this rule was applied, and the solution has met with reasonable acquiescence on the part of the parties in dispute.

No new activities have been undertaken by the committee this year.

Respectfully submitted,

FRANK S. CROCKETT, Chairman.  
A. F. KNOEFEL,  
W. D. NICHOLS.

## REPORT OF COMMITTEE ON POST GRADUATE STUDY

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

This committee, a fact-finding committee, has had on hand and has made a detailed investigation of reports from practically every state in the United States, as to what form or type of Post Graduate Study is available in the respective states for the individual members of the different State Medical Associations. It appears from these reports that in a large number of the more highly organized states a quite serious effort is being made to provide the local County Medical Societies either with a definite series of lectures on one or more particular subject or to furnish speakers for the County Medical meetings when and as demanded. In certain of these states this work is carried out entirely by the State Association through its executive secretary; in others, it is strictly an activity of the State University, through the extension department of its Medical College; while in still others, it is a combination of these two agencies.

The subject of Post Graduate Study for practitioners is, quite certainly, an imposing one, far reaching in its effects; and the committee, in the limited time allotted to them for this study, scarcely has scratched the surface in its investigations. The committee feels that a further and more detailed study of the needs of the Association should be undertaken, probably along two parallel lines.

First, on account of the lack of interest in certain districts, possibly because of the scarcity of physicians in these regions, there seems to be an apathetic or indifferent regard toward Post Graduate Study; consequently, the committee feels that through the Association's executive secretary, either by direct letter or otherwise, to every physician in the state, inquiry should be made to find out what the men in the different respective counties, districts, or groups of counties desire, and to what extent they desire Post Graduate Study.

Secondly, at the same time, inquiry could be made toward the finding out of what teaching or lecture talent resides among the physicians in the different districts themselves.

Finally, having both these factors well in hand, arrangements could be made to use local talent where available for conducting any selected group of lectures, and state talent where local is missing, supplementing these two by out of state talent where it may seem indicated or desired. With the state organized in some such manner, it would be possible to draft talent from one district into another to supply lecturers or clinicians.

The committee believes that the State Society, as a whole, should bear the expenses and carry out the necessary investigations to consolidate the material and arrange the programs through the executive secretary's office which is centrally located within the state; then there should be on hand, in that office, a list of speakers, clinicians, and programs of the different activities, in order that local county presidents and secretaries could select from such list the material they desired. Such

list or schedule of lecturers and programs, as outlined above, should be composed not only of the men of our State University, but also of all those throughout the state who can and are willing to qualify.

The travel expenses of the speaker or speakers putting on the program before the local societies should be born by the society itself; they are the ones to benefit; their interest probably will be more proportionate than if it is handed to them gratis

Signed:

FLOYD ROMBERGER, Chairman,  
C. NORMAN HOWARD,  
LYMAN OVERSHINER,  
FRANK E. SAYERS,  
A. S. JAEGER.

## REPORT OF THE DIPHTHERIA COMMITTEE

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

In accordance with a resolution adopted by the House of Delegates at the 1926 annual meeting, the President of the Indiana State Medical Association appointed a Diphtheria Committee "to co-operate with the State Board of Health, State Parent-Teachers Association, County Medical Societies, local welfare organizations and local health officials in an effort to secure the widest possible use of toxin antitoxin in the prevention and control of diphtheria in the state of Indiana."

The committee was originally formed with Dr. C. H. Good of Huntington, who introduced the resolution, as chairman. Dr. Good later resigned his position, feeling that this work should be carried on by some man who could devote more time to it.

In December the committee met with representatives of the Parent-Teachers Association and the State Board of Health in the office of the State Board of Health and outlined a plan of campaign, in which the State Medical Association was to take the following part:

1. Advise methods for securing the co-operation of the medical profession throughout the state.
2. Secure participation locally by County Medical Societies.
3. Inform county medical societies of the progress of diphtheria prevention work throughout the state by—
  - (a) Letters to secretaries of county societies to be read at society meetings;
  - (b) Publication of articles, letters and editorials in THE JOURNAL;
  - (c) Publication of articles by Bureau of Publicity.
4. Distribute literature, statistics and studies on diphtheria prevention for use of the medical profession.
5. Provide sessions on diphtheria prevention at county and district medical meetings with speakers, exhibits, films.
6. Secure the co-operation of local physicians with local health officers in securing funds for expense of immunization of indigent children.
7. Outline for the practicing physician specific ways whereby he may assist in having parents of his families understand the importance of having their children immunized by—
  - (a) Talking it over with his parents and explaining the simplicity and harmlessness of toxin-antitoxin.
  - (b) Keeping a supply of literature on the use of toxin-antitoxin on his waiting room table.
  - (c) Posting a placard advising immunization for children in his reception room or office.
  - (d) Distributing pamphlets to his families, especially those with young children.
8. Advise physicians to dis-associate Schick test from toxin-antitoxin immunization.

Your committee desires to make the following fact clear—The ultimate aim of this campaign is to have the public consider immunization against diphtheria by the family physician as a routine matter for their children



and to have this procedure carried out in early infancy. The State Department of Health did not undertake the treatment and administration of toxin-antitoxin. It limited itself to educational work.

Thousands of school children throughout the state have been immunized against diphtheria through the educational work of the physicians of the State and State Board of Health with the co-operation of parent-teachers clubs and other lay organizations. It is impossible to tabulate just how many have been immunized as a result of this campaign, but the results have been very much worth while in guarding the public health. Speakers provided by the Bureau of Publicity have stressed the importance of diphtheria prevention in their talks. Diphtheria immunization films and talks in which immunization was emphasized was given to a total of 54,000 school children and adults during the last school year under the Visual Education Department of the State Board of Health. A full report upon diphtheria mortality in Indiana and the diphtheria prevention campaign is given in the May 1927 number of the JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

Your committee wishes to thank the Bureau of Publicity with which it held several meetings, for the splendid co-operation given by the Bureau in this work. It also wishes to thank the individual physicians of the state who have helped to carry this campaign forward.

Respectfully submitted,

JAMES H. STYGALL, Chairman.  
DON MILLER.  
WILLIAM H. STEMME.

#### REPORT OF THE BUDGET COMMITTEE

*House of Delegates, Indiana State Medical Association:*  
Gentlemen:—The itemized statement of the 1927 budget and its operation to date is included in the report of the Treasurer, Dr. Doeppers, and you will please refer to that to save duplication of printing.

Your committee can do little more than discuss the inauguration of the system of budgetary control. Only seven months of the first year's experiment have elapsed, and we cannot yet tell whether the expenditure will exceed the estimated budget. In one department we already have spent more than was allowed, but the Legislative Committee felt that the new bill which was passed warranted the excessive expense, and that if the additions were not made to the available fund, all would be lost. Even at that the unexpected savings in other departments seem to justify the presumption that the end of the year will find us but slightly over our income. It is too early to make any constructive criticisms for the benefit of the committee which will follow this one, as the annual session is a large item of the year's expense, but there can be no question as to the value of the plan.

On account of the Legislature meeting every two years it will take, at least, four years before the budget can be stabilized in the light of past experiences. It has not been the aim of the committee this year to pare down the expenses in order to store up money, but it has tried to apportion the funds so that the different departments of the Association will be fairly balanced in their allowances, and so that you will get value received for all your money expended.

The committee deems it a privilege to be the pioneer in this work and bespeaks a latitude in your judgment until the plan has had sufficient trial.

Respectfully submitted,

CHARLES N. COMBS, Chairman.  
FRANK W. CREGOR.  
GEORGE R. DANIELS.  
WILLIAM DOEPPERS.  
WILLIAM R. DAVIDSON.

#### REPORT OF COMMITTEE OF NECROLOGY

*House of Delegates, Indiana State Medical Association:*  
Gentlemen:—Your committee is happy to report a

very marked decrease in the number of deaths in the medical profession of Indiana during the year now closing. In the preceding year we had 101 deaths while the present year yielded only 78 of our number to "That Innumerable Caravan." A total decrease of 23. This is the smallest number of deaths yet reported by this writer.

September, 1926, led with 10; November, '27, was next with 9; July, '27, had 8; March and June of '27 each had 7; January and April, '26, each came in with 6; February, August October and December, 1926, each had 5, while May of '27, totaled the least with only 3.

Of the number, 37 were members of the Indiana State Medical Association and the same were also members of the A. M. A. Only 8 of the entire list were Fellows of the A. M. A.

Two had been presidents of the State Association; Dr. A. W. Brayton of Indianapolis in 1902, and Dr. Jonas Stewart of Anderson in 1904. Dr. Brayton had also been editor of the INDIANA MEDICAL JOURNAL for a number of years. He devoted much time and study to birds and fishes, writing books of much interest upon both these subjects.

The allopathic school was preferred by 64; one had chosen eclectic; 3 were physio-medical graduates, while 10 could not be ascertained by the committee as to schooling.

Only one of the entire group had engaged in any war. Dr. A. W. Davidson of Brownsburg, serving in the Civil War. One woman, Dr. Harriet Wiley of Portland, came within the grasp of the "Grim Reaper."

The causes of death were as follows: Pneumonia leading with a total of 17; heart diseases, 15; Bright's, 12; apoplexy, 9; cancer, 6; arteriosclerosis, 4; cholecystitis, 2; tuberculosis, 2; automobile accident, 2; streptococcus infection of hand, 1; angina pectoris, 1; diabetes, 3, and influenza, 4.

Medical schools preferred were in order as herein given: Kentucky School of Medicine, 18; Indiana Med. Col., 10; College of P. and S. of Indianapolis, 5; Rush, 5; Med. Col. of Ohio, 4; U. of Illinois, 3; Jefferson Medical, 3; Cin. Medical, Western Reserve of Cleveland, Physio-medical of Indianapolis and U. of Michigan, each 2; Columbus Medical, P. and S. of Keokuk, Iowa, Long Island Hospital Eclectic of Indianapolis, Detroit School of Medicine, U. of Tenn., Curtis Physio-medical of Marion, Ind., Northwestern Med. Col. for Women, Bellevue, Missouri Med. Col. and the Fort Wayne Med. Col. of Ind., each graduated one.

The oldest to succumb was Dr. William G. Chaffee of Huntington, aged 92. The youngest was Dr. Don L. Miller of Indianapolis, age 40 years.

The age periods of deaths were as follows:—40 to 50 claimed 3; in the 50 year period there were 18; in the 60, were 21; the 70 years stretch had the highest number, 26, while in the 80 decade 9 fell with the 90 mark reached only by Dr. Chaffee who passed away at 92.

The combined ages of all was 5,293 years. The average age thus being  $67\frac{1}{2}$  plus, a gain over the same of last year of  $2\frac{1}{4}$  years.

Those now engaged in the practice may take heart from this review, since it is shown that the span of years for the physician is gradually increasing and the death rate decreasing.

Respectfully submitted,

GEORGE G. RICHARDSON, Chairman.

#### REPORT OF THE COMMITTEE ON SECRETARIES CONFERENCES

*House of Delegates, Indiana State Medical Association:*

Gentlemen:—Arrangement for the annual dinner meeting and get-together of the secretaries on September 28, the opening night of the 1927 state meeting will be the only undertaking of this committee for the present year.



As the secretaries' organization is a new idea in Indiana, and as the Budget Committee allowed the Secretaries' Committee only a limited fund, the committee felt it was best to proceed slowly this year.

Respectfully submitted,

E. O. HARROLD, Chairman.

A. M. MITCHELL,

E. W. BECKES.

### REPORT OF THE BUREAU OF PUBLICITY

*House of Delegates, Indiana State Medical Association:*  
Gentlemen:

#### I. INTRODUCTION

(1) *The Bureau is an active Body.* As an active, continually functioning committee, always ready to be of service to the county, state, and American Medical Associations as well as to the individual physician, the Bureau of Publicity is more than happy to outline in a brief way for the profession its aims and accomplishments for the year 1927.

In order to take care of its seemingly never-ending duties, the Bureau meets Monday afternoon of each week at the headquarter's office of the Indiana State Medical Association, 1004 Hume-Mansur Building, Indianapolis, to check its work, outline its policies, answer correspondence, assign speakers, consider its newspaper releases and discuss many matters of importance to the profession and to the public. The Bureau invites all members of the association to attend any of these weekly conferences, and at all times welcomes suggestions from the profession for enlarging and bettering its work.

(2) *Increase of Bureau's Work.* Since its establishment on a working basis in 1923, the Bureau has undertaken, created and fallen heir to many new duties. As a result of the broad recognition given its work, the Bureau finds it no longer necessary to ask editors to print its weekly releases but often receives letters from editors and publishers asking that their newspapers be placed on the mailing list to receive all releases from the Bureau.

In addition, numerous requests come frequently from outside of Indiana asking for copies of articles previously prepared and released by the Bureau. Judging from the number of these requests for copies, one of the most popular of the Bureau releases was the "Warning" issued by the Bureau more than a year ago against Bernarr Macfadden and the teachings of his periodicals.

#### II. GENERAL ACTIVITIES OF THE BUREAU DURING 1927:

1. The Bureau prepared a report upon the activities of the Indiana State Medical Association for the annual bulletin of the Indiana State Health Council. This booklet, which was printed by the Extension Division of Indiana University, was distributed from the Bureau offices to each county society secretary and to the secretaries of each state medical society. It contained a short historical sketch and an outline of the activities and synopsis of the undertakings of the State Association.

2. The Bureau co-operated with the Indiana High School Athletic Association in preparing a report upon high school athletics and the effect of competitive athletics upon the health of high school boys and girls. The Bureau wishes to compliment the Indiana High School Athletic Association upon its action in regard to physicians' certificates which provides "that each student participating in inter-school basketball, football or track shall have a physician's certificate on file in the principal's office stating that this student is physically fit to enter athletic contests."

A bulletin issued by the Indiana High School Athletic Association upon this ruling says, "The physical examinations should be carefully and efficiently made by regularly licensed physicians—certificates issued on the basis of anything less than thorough examinations by reputable physicians will do more harm than good.

They will be misleading and will offer no protection at all to the physician, the player, the parents or the school."

3. The Bureau co-operated with county medical societies in health educational campaigns in various cities of the state.

4. An important new field of work of the Bureau developed in warning the public and the profession against any intensive campaign before civic clubs by food faddists.

(a) The Bureau issued a state-wide warning against Paul O. Sampson, who came to Indiana to make an intensive campaign under the name of a so-called organization, "The National Health League." The Bureau issued its warning based upon an investigation of the American Medical Association. A letter from the American Medical Association states, "The so-called National Health League is, apparently, a scheme on the part of Paul O. Sampson to capitalize the public's ignorance of dietetics and hygiene and make an easy living for Sampson. The stationery of this self-styled league gives as the essential officers of the paper organization 'Cecil Loy' as secretary-treasurer, 'Frederick Earl' as publicity director, and Paul O. Sampson as general director, food specialist and lecturer. We have learned that 'Cecil Loy' and 'Frederick Earl' are the given names, respectively, of Sampson's two sons, aged 20 and 16 years. Sampson, who styles himself a food specialist and goes around the country purporting to give talks on dietetics and nutrition is, of course, utterly unknown to the scientific world." Warnings were sent to county society secretaries and to officers of various luncheon clubs against Sampson who under the guise of scientific lectures and health instruction courses, collected money from the public.

(b) Special warning was also sent out against "Dr." Frank McCoy, a drugless healer who came to Indiana from California and started a "health column" in several papers of the state. H. W. Hill wrote in the August 1927 number of *Hygeia* a special article on this man, entitled "More McCoy Misinformation," in which he details many misstatements found in McCoy's book, "The Fast Way to Health."

5. During the year the Bureau co-operated with

(a) Legislative Committee of the State Medical Association. During the Legislative session, the attention of the executive secretary was devoted almost exclusively to work on the Legislative program.

(b) Diphtheria Committee of the Indiana State Medical Association and the State Board of Health and the Parent-Teachers Association. Active co-operation was given in the intensive campaign carried on by these three organizations under the direction of the State Board of Health.

(c) Better Business Bureau of Indiana. It is gratifying to report that the Better Business Bureau has referred questions of medical frauds to the Bureau of Publicity and the Bureau whenever possible, has given cordial co-operation in exposing and preventing fraudulent activities among pretenders and quacks.

(d) Indiana State Dental Association. The Bureau aided in the publicity for 1927 State Dental Week last May by the publication of one of its regular weekly releases drawing attention to Dental Health Week.

6. The Bureau of Publicity of the Indiana State Medical Association has been a model upon which many other states have based their public educational work.

(a) A committee from the State Medical Society of Wisconsin visited the Bureau last year and as a result a successful publicity committee was established in that state. Upon request of the Indiana Bureau, J. G. Crownhart, Executive Secretary of the State Society, in a letter under the date of July 26, 1927, summarizes the work done in Wisconsin along these lines as follows:

"Effective January, 1926, we offered to the press of the state a story a week on some subject relating to scientific medicine and public health of interest to their readers. We are now



serving upwards of 200 daily and weekly newspapers of the state with this service. We find that it is very widely used and we believe it to be of excellent value.

"This service is prepared under the direction of an experienced newspaper man in the following manner:

"Some physician will be asked to write a 300 to 450 word statement on some subject as hay fever, acute appendicitis, etc., containing information that the laity should know and containing nothing that is not expressive of general medical knowledge. Upon receipt of this statement the director of the service writes a 'lead' and re-submits the story to the physician concerned that he may make sure no change in meaning has occurred in the transposition of the article to a popular newspaper story. It is then mimeographed and forwarded to the press for release on a given day. No individual names occur and the authority quoted is the Committee on Public Health of this Society."

(b) The Professional Relations Committee of the West Virginia State Medical Association is undertaking work in that state along the same general lines as the Indiana Bureau.

7. Only within the last month the Bureau has taken on a new bit of work. It will gather, prepare and act as a clearing house for notes which appear in the Indiana Column of the Journal of the American Medical Association.

### III. HELP FROM THE LAITY:

The Bureau feels that it is working along the right lines, especially when a recognized publication such as the Saturday Evening Post presents editorials of the following type that have appeared in that magazine recently:

"There are other fields than that of popular medical education in which laymen can do much to further the efforts of physicians. Thousands of lives and vast sums of money are annually exacted as tribute to unscrupulous nostrum venders. There are dozens of so-called consumption cures and cancer cures which do a tremendous amount of harm owing to the fact that faith in them keep persons away from competent practitioners until it is too late to save their lives. There are means of coping with this growing evil, but they are in the hands of legislators and business men and not in those of the doctors.

"There is another matter in which physicians stand in grave need of the co-operation of the lay public. Compulsory vaccination laws are under fire. Bills have been introduced in state legislature which, if they become law, would prevent the manufacture of smallpox vaccine, diphtheria antitoxin and most other biological products which play so large a part in modern medicine.

"If the comparative inactivity of physicians and men of science is a trustworthy index of their reaction to these attacks, even they do not perceive the reality of the menace which threatens their calling and all the millions whose lives depend upon its free and proper exercise. Unless the situation is promptly and vigorously taken in hand it will inevitably become worse before it can become better."

### IV. PERIODIC HEALTH EXAMINATION WORK:

1. The following brief report of the Bureau's work along this line was given at the Annual Conference of Secretaries of Constituent State Medical Associations in Chicago last November:

"In Indiana our periodic health examination work started along oratorical lines and continued so for three or four months until finally one county secretary said, 'We are having too much oratory and too little real demonstration.' Shortly after that the American Medical Association manuals came out and we had a basis on which to start the demonstration work. In Indiana the work is carried on through the Bureau of Publicity which meets at the state headquarter's office once a week.

"Under the direction of the Bureau, the work along periodic health examination lines has taken two courses, first the education of the public and, second, the education of the physicians themselves by demonstration.

"In the last year, we have had twenty-five requests from luncheon and civic clubs for periodic health examination lectures and those were given by physicians supplied by the Bureau of Publicity. We have a more or less trained group of physicians in Indiana who make these lay talks. Demonstrations of periodic health examinations have been made in sixteen of the county societies. These demonstrations were made by physicians who have been trained in this particular work under the direction of the Bureau. The feature of our annual state convention this year was the periodic health examination room. There were placards posted all over the hotel calling attention to the periodic health examination demonstration and we had special hours and a room set aside for periodic health examination work.

"Through the Publicity Bureau an article is sent out each week to the lay press of the state. These articles go to 120 papers, and about 80 of these papers print the articles. Of course, it is not always the same 80 papers, but in the course of a month we cover the state pretty well. These articles go also to each local parent-teachers' association in the state through the parent-teachers' executive secretary.

"Instead of labeling all these articles Periodic Health Examinations, we camouflage them a bit, heading them, 'Bodily Book-keeping,' 'When Winter Comes,' 'Rejuvenation: Fact or Fancy'

Etc. In our rejuvenation news story we say that the best method for rejuvenation of which we know is the periodic health examination.

"A typical periodic health examination program used before a county or district society meeting follows: First, a speaker talks on the importance and character of periodic health examinations. Then there is a demonstration of how to give a periodic examination, and next we have a speaker who treats the subject with special reference to the prevention of tuberculosis, or from some other special medical point of view.

"In Indiana we have done our periodic health examination work with our own physicians. Many counties use their own physicians in giving demonstrations. Of course, the American Medical Association manuals have been distributed at the expense of the Association to each member of the state society."

### V. A LOOK BACKWARDS

With publicity bureaus taking up the work in various states it is a matter of historic interest that we in Indiana were pioneers in this work. Records show that J. A. MacDonald of Indianapolis presented a motion at the second meeting of the House of Delegates at Muncie, September 27, 1922, for "the chair to appoint a committee of three to arrange for the selection of an educational secretary whose duties and salary shall be defined by the Council." William R. Davidson of Evansville, the President of the State Association, appointed a committee composed of Wm. N. Wishard, Chairman; David Ross, and Frank W. Cregor.

At the mid-winter meeting of the Council on January 19, 1923, Dr. Wishard as chairman of this Committee, presented a report recommending that a "Bureau of Information" be established. At a subsequent meeting of the Bureau it was recommended that the name be changed to the Bureau of Publicity which more accurately defined the scope of the work contemplated.

The report recommended the appointment of Dr. J. N. Hurty as secretary. Due to ill health, Dr. Hurty was unable to serve, and Dr. James H. Stygall of Indianapolis was appointed in his stead. The Bureau owes a debt of gratitude for the efficient manner in which Dr. Stygall carried to completion the difficult work of establishing the Bureau. Indeed the work done by Dr. Stygall forms the foundation upon which is built, not only our present Bureau but also our present office of executive secretary.

The Bureau of Publicity since its establishment has been made up as follows:

1924	{	WM. N. WISHARD, Chairman FRANK W. CREGOR DAVID ROSS
1925	{	WM. N. WISHARD, Chairman S. E. EARP WM. A. DOEPPERS
1926	{	WM. N. WISHARD, Chairman S. E. EARP MURRAY N. HADLEY
1927	{	WM. N. WISHARD, Chairman MURRAY N. HADLEY J. A. MACDONALD

### VI. DISTRIBUTION OF WEEKLY RELEASES

1. In addition to the newspapers, and the parent-teachers' associations through Indiana University Extension, the weekly releases are distributed as follows: 50 to the Indianapolis W. C. T. U. and 100 to the public health nurses through the Nursing Division of the Indiana State Board of Health. The Bureau wishes again to thank Mrs. Edna Hatfield Edmondson, field worker of the State Parent-Teachers' Association, and secretary of the Extension Division, for aid in distribution of releases.

### VII. LIST OF RELEASES FOR 1926-1927

Hot Weather Hints  
Malaria  
How to Sleep Well  
Exercise  
Dangerous Waters  
Preparation of Children for School



West Baden Convention  
 Hay Fever Hints (Associated Press)  
 Competitive Athletics  
 The Lost Art of Walking  
 Tularemia  
 Where Do You Sleep  
 Children and Fear  
 Pork as Food  
 Two Winter Warnings  
 Injuries While Hunting  
 Typhoid Fever in Winter  
 Diphtheria Prevention Campaign  
 Christmas Hints from the Physician  
 A New Year's Resolution  
 Basketball and Physical Examinations  
 Breakfast  
 Open Season for Colds  
 Attacking Health Superstitions  
 Spring Fever  
 Spring Cleaning  
 Feet of Children  
 Dental Health Week  
 Can You Answer These?  
 Can You Answer These? (Second release)  
 Poison Ivy  
 Hay Fever  
 What's Wrong, Indiana?  
 A Hoosier Hero  
 A Safe and Sane July Fourth  
 Infant Care in Warm Weather  
 Rabies or Hydrophobia  
 Strenuous Week-Ends

#### VIII. SPEAKERS WERE SUPPLIED FOR THE FOLLOWING PUBLIC AND MEDICAL MEETINGS IN 1926-1927:

1926

- Oct. 20—Tri-County Medical Society at North Vernon, Ind.  
 Oct. 21-23—Southwestern Indiana Teachers meeting, Evansville, Ind.  
 Oct. 28—Third District Medical Society, Bedford, Ind.  
 Dec. 8—Marion Kiwanis Club, Marion, Ind.  
 Dec. 9—Laporte County Medical Society — Periodic Health Demonstration.

1927

- Jan. 3—Rush County Medical Society, Rushville, Ind.  
 Jan. 24—Connersville Rotary Club, Connersville, Ind.  
 Mar. 8—Indianapolis Medical Society — Periodic Health Demonstration and Talk, Indianapolis.  
 Mar. 10—Evansville Kiwanis Club, Periodic Health Examination, Evansville, Ind.  
 Mar. 25—Miami County Medical Society, Peru, Ind.  
 Mar. 31—Richmond Kiwanis Club, Richmond, Ind.  
 April 4—Rush County Medical Society, Rushville, Ind.  
 April 7—Clinton County Medical Society, Frankfort, Ind.  
 April 11—Greensburg Rotary Club, Greensburg, Ind.  
 April 28—Clinton County Medical Society, Frankfort, Ind.  
 May 13—9th District Medical Society, Tipton, Ind.  
 May 26—6th District Medical Society, Connersville, Ind.  
 June 2—Fountain-Warren Medical Society, Covington, Ind.  
 June 9—Rushville Kiwanis Club, Rushville, Ind.  
 June 21—Knox County Medical Society, Vincennes, Ind.  
 July 20—Newcastle Rotary Club, Newcastle, Ind.

#### IX. SUGGESTIONS TO SPEAKERS

1. The following suggestions are offered not because we feel that any particular man needs them, but because many pitfalls exist into which a physician may sometimes fall when addressing the public. These suggestions are made to each speaker who addresses a lay audience on the part of the Publicity Bureau. The Bureau feels that

they may be helpful to all physicians who make public addresses:

1. The use of scientific terms should be avoided when speaking to a lay audience.
2. Do not speak over thirty minutes unless urged to do so.
3. Keep close to your subject.
4. Put pep into your talk and speak loud enough for all to hear.
5. Speaker should arrive at least a few minutes before the hour announced.
6. Speaker should endeavor to present the composite view of the profession in addressing the public.
7. Avoid citation of personal case reports and aid the Bureau of Publicity in its effort to make all presentation of its work as impersonal as possible.

#### X. WORK OF THE BUREAU FOR THE FUTURE

The Bureau will follow out the general line of work it has been doing in the past, but will always strive to take immediate advantage of any new avenues of publicity as they may be opened.

#### XI. FINANCIAL REPORT

The expenditures of the Bureau from August 1, 1926, to August 1 1927, follow:

Postage .....	\$157.60
Clipping service .....	57.59
Indianapolis News, mailing copies of papers to certain list .....	10.00
Stationery and office supplies .....	112.46
Stencils and mimeograph supplies .....	46.65
Speakers' expenses .....	5.00
Circulars from A. M. A. ....	.60

\$389.90

The Bureau was allowed by the Budget Committee \$1500 for the year of 1927. Of this amount the Committee has spent \$237 from January 1 to August 1, 1927, leaving a balance of \$1263 unexpended in the Budget for the remainder of 1927. The expenses of the Bureau for the past year were comparatively trivial because the secretary's salary and other sums which formerly were paid from Bureau funds are now paid out of the regular executive fund. Among these expenses which were paid by the Bureau but are now paid from other funds are Executive Secretary's salary, salary of stenographers, telephone, rent, etc.

Respectfully submitted,

WM. N. WISHARD, Chairman.  
 MURRAY N. HADLEY,  
 J. A. MACDONALD,  
 FRANK W. CREGOR, President.  
 Ex-officio member.

#### REPORT OF DELEGATES TO THE A. M. A.

*House of Delegates, Indiana State Medical Association:*  
 Gentlemen:

Your delegates to the A. M. A. respectfully refer you to the report concerning the activities of the Washington session of the American Medical Association as printed in the July number of THE JOURNAL. We therefore deem it unnecessary to more than call your attention to the essential features mentioned in the report to which attention has been called.

The Washington session was large, there being nearly 6300 registrants. The activities were well cared for by the local committee of arrangements, assisted by the general manager of the Association. The accommodations were reasonably satisfactory throughout.

A feature of the session was the address delivered by the President of the United States, Calvin Coolidge, who conferred high praise on the medical profession for its contribution to the social organization.

The lay press carried very complete and trustworthy reports of the proceedings of the Association, and the

care exercised in having these reports trustworthy was due to an arrangement previously made by the A. M. A. office.

The scientific meetings were well attended and the programs were of marked excellence, there being more than 300 manuscripts presented before the sixteen sections.

As usual, the exhibits, and in particular the scientific exhibit and demonstrations, were of a high order of excellence. It was a noteworthy fact that these scientific demonstrations are becoming more and more popular year after year, and though arrangements for them mean a very large expense to the Association yet it is thought that it pays, as evidenced by the interest and enthusiasm manifested by those who attend.

The work of the House of Delegates required a good portion of four full days. The speaker of the House, in his annual address, urged continued attention to the problems of nursing and nursing service in the United States, and the president of the Association, Dr. Wendell C. Phillips, urged continuous attention to the education of the public in matters of health. He suggested a proper system of censorship to safeguard medical publicity. He also recommended consideration of the restriction placed on physicians in the prescribing of alcoholic liquors. The president-elect, Dr. J. N. Jackson, urged new attention to the problems of medical ethics, and recommended the preparation of a manual which will make clear both to the profession and the public the intent of "The Principles of Medical Ethics."

In keeping with this recommendation, the president of the Association appointed a committee to act on public responsibility having to do with the relationship of the medical profession to the public.

An interesting feature in connection with the report of the Committee on Medical Education was a complaint from the reference committee that more attention should be given to the supply of physicians and the question of medical care in rural districts. The recommendation also was made that the present curriculum in medical schools be reduced materially, and that any consideration of a new curriculum should give special attention to the training of general practitioners with only brief courses in the more important specialties.

The House went on record as in favor of legislation that will suppress both the manufacture and sale of heroin. It also condemned the effort to place a value on any therapeutic agent by legislative enactment, referendum, popular vote, or any similar method. This, of course, had reference to the prescribing of alcoholic liquors for medicinal use.

State medical associations were urged to establish disaster relief.

Owing to misleading statements on the part of advocates of the Sheppard-Towner Act, the House recommended that the United States census bureau secure a strictly uniform definition of maternal mortality for the bureaus of vital statistics of various nations. This will do away with the juggling of statistics.

The Board of Trustees was asked to consider the question of the control of the manufacture, distribution, sale and commercial use of toilet preparations for preserving and enhancing personal beauty.

State Associations are asked to appoint or elect delegates to the A. M. A. in time to permit the speaker of the House of Delegates to announce reference committees thirty days in advance of the session.

The duplication of health activities was condemned, and it was recommended that there be more unification in various organizations having to do with health conferences.

Contract practice came in for considerable discussion, and the Judicial Council, to whom the matter was referred, decided that each contract must be judged on its own merit, as both ethical and unethical contracts are possible.

One of your Indiana delegates introduced three resolutions, all of which were passed unanimously. The first was a resolution to the effect that physicians are under no obligation to provide information to insurance nor indemnity companies unless paid the usual fee charged for similar services to private patients. The second resolution concerns the matter of medical publicity and personal exploitation by certain prominent members of the medical profession, and the opinion was accepted and adopted that all articles of an educational nature on medical or health subjects intended for the lay press or lay audiences, shall give expression to the consensus of opinion of the medical profession rather than to personal views, and that such articles shall appear preferably under the auspices of the American Medical Association, or one of its component county societies or constituent state associations. The third resolution pertained to inadequate facilities for entertaining the American Medical Association and made it incumbent upon the Board of Trustees to investigate in advance of sessions the facilities for caring for the Association and all of its activities, and to enable the House to vote intelligently it was decided that two or more approved cities be nominated by the Board of Trustees as places where the Association can be cared for adequately and satisfactorily the ensuing year. The Board of Trustees also was given authority to change the place of holding the session if for any reason it is deemed advisable.

A resolution was passed recommending an amendment to the revenue bill whereby individuals may deduct from income tax the expenses of medical treatment for himself and family, though the whole matter was referred to the Board of Trustees with the suggestion that the matter be referred to constituent state medical societies for action.

The House passed a resolution which gives the support of the American Medical Association to the work of grading nursing schools.

The need of a physician's home was condemned by a committee appointed to investigate the matter, and the House adopted the report of the committee which stated that the need for a national home is not sufficient to warrant the American Medical Association in establishing, managing and sustaining such an institution.

Collaboration between physicians and health officers was urged as the only method of meeting the public health situation for the good of the profession and the public.

The American Medical Association is to continue in affiliation in all the activities of the United States Government in the work of eliminating trachoma among the Indians.

The House reaffirmed its approval of the principle of the Parker Bill, co-ordinating the health activities of the federal government under the direction of the United States Public Health Service. It also adopted the report recommending approval of the Ransdall bill appropriating ten million dollars to establish a national institute of health under the control of the Surgeon General of the United States Public Health Service. It also reiterated its approval of the Bursum bill which relates to the employment of disabled emergency army officers on a parity with all other classes of disabled officers of the World War now on the retired list.

The question of curtailing or preventing physicians from prescribing medicinal liquor came up for extended discussion, and ended in the recommendation that a bill be presented to Congress, correcting the unfortunate provision of the Volstead Act limiting the amount of alcohol used, and providing such regulations as will permit a doctor to prescribe whatever amount of alcoholic liquors may be needed for his patients, and subject to such reasonable restriction as may be thought wise and best after a conference with the head of the prohibition department. In connection with this alcohol question the



American Medical Association declared its adherence to the principle that legislative bodies composed of laymen should not enact restrictive laws regulating the administration of any therapeutic agents by physicians legally qualified to practice medicine.

The thanks of the American Medical Association were extended to the members of Congress for passing the caustic poison act.

The Board of Trustees was authorized to prepare letters and literature concerning periodic health examinations that may be sent to the public with a view to circumventing the harmful advertising activities of commercial agencies dealing with periodic health examinations.

The Board of Trustees was asked to formulate an opinion concerning legislation that will permit physicians to give contraceptive information to their patients in the regular course of practice.

The Board of Trustees was empowered to consider the question of extending the U. S. Public Health Service to the fields of industrial hygiene.

The American Medical Association will be represented in a joint committee with the Woman's Auxiliary.

In the election of officers, Dr. William S. Thayer, of Baltimore, was elected president; Dr. Charles A. Elliot, of Chicago, vice-president; Dr. Olin West, secretary, and Arthur A. Hayden, treasurer; were re-elected, as also was speaker Dr. Frederick C. Warnshuis, of Grand Rapids, and vice-speaker, Dr. Allen H. Bunce, of Atlanta. Of the trustees, Dr. Edward B. Heckel, of Pittsburgh, and Rock Sleyster, of Wauwatosa, were re-elected. The incoming president, Dr. J. N. Jackson, made the following nominations to appointments on the various councils: for the Judicial Council, Dr. Donald McCrae, Jr., Council Bluffs, Iowa, and Dr. Frank Cregor, of Indianapolis, to succeed Dr. Thayer. For the Council on Medical Education and Hospitals, Dr. Emmett P. North, of St. Louis; for the Council on Scientific Assembly, Dr. Frank H. Lahey, of Boston. These nominations were confirmed.

Minneapolis was selected as the place for holding the next annual session.

Respectfully submitted,  
ALBERT E. BULSON, JR.  
DAVID W. ROSS,  
HARRY ELLIOTT,  
E. M. SHANKLIN,

LIST OF PRESIDENTS OF THE INDIANA STATE MEDICAL ASSOCIATION SINCE ITS ORGANIZATION

<i>Names and Residences</i>	<i>Elected</i>	<i>Served</i>
Livingston Dunlap, Indianapolis.....	1849	1849
William T. S. Cornett, Versailles.....	1849	1850
Asahel Clapp, New Albany.....	1850	1851
George W. Mears, Indianapolis.....	1851	1852
Jeremiah H. Brower, Lawrenceburg.....	1852	1853
Elizur H. Deming, Lafayette.....	1853	1854
Madison J. Bray, Evansville.....	1854	1855
William Lomax, Marion.....	1855	1856
Daniel Meeker, Laporte.....	1856	1857
Talbott Bullard, Indianapolis.....	1857	1858
Nathan Johnson, Cambridge City.....	1858	1859
David Hutchinson, Mooresville.....	1859	1860
Benjamin S. Woodworth, Fort Wayne.....	1860	1861
Théophilus Parvin, Indianapolis.....	1861	1862
James F. Hibberd, Richmond.....	1862	1863
John Sloan, New Albany.....	1863	1864
John Moffett (acting) Rushville.....	1864	1864
Samuel M. Linton, Columbus.....	1864	1864
Myron H. Harding, Lawrenceburg.....	1865	1865
Wilson Lockhart (acting), Danville.....	1865	1866
Vierling Kersey, Richmond.....	1866	1867
John S. Bobbs, Indianapolis.....	1867	1868
Nathaniel Field, Jeffersonville.....	1868	1869
George Sutton, Aurora.....	1869	1870
Robert N. Todd, Indianapolis.....	1870	1871

Henry P. Ayres, Fort Wayne.....	1871	1872
Joel Pennington, Milton.....	1872	1873
Isaac Casselberry, Evansville.....	1873	1874
Wilson Hobbs, Knightstown.....	1873	1874
Richard E. Haughton, Richmond.....	1874	1875
John H. Helm, Peru.....	1875	1876
Samuel S. Boyd, Dublin.....	1876	1877
Luther D. Waterman, Indianapolis.....	1877	1878
Louis Humphreys, South Bend.....	1878	.....
Benj. Newland (acting), Bedford (v.-p.)	1878	1879
Jacob R. Weist, Richmond.....	1879	1880
Thomas B. Harvey, Indianapolis.....	1880	1881
Marshall Sexton, Rushville.....	1881	1882
William H. Bell, Logansport.....	1882	1883
Samuel E. Munford, Princeton.....	1883	1884
James H. Woodburn, Indianapolis.....	1884	1885
James S. Gregg, Fort Wayne.....	1885	1886
General W. H. Kemper, Muncie.....	1886	1887
Samuel H. Charlton, Seymour.....	1887	1888
William H. Wishard, Indianapolis.....	1888	1889
James D. Gatch, Lawrenceburg.....	1889	1890
Gonsolvo C. Smythe, Greencastle.....	1890	1891
Edwin Walker, Evansville.....	1891	1892
George F. Beasley, Lafayette.....	1892	1893
Charles A. Daugherty, South Bend.....	1893	1894
Elijah S. Elder, Indianapolis.....	1894	1895
Charles S. Bond (acting), Richmond.....	1894	1895
Miles F. Porter, Fort Wayne.....	1895	1896
James H. Ford, Wabash.....	1896	1897
William N. Wishard, Indianapolis.....	1897	1898
John C. Sexton, Rushville.....	1898	1899
Walker Schell, Terre Haute.....	1899	1900
George W. McCaskey, Fort Wayne.....	1900	1901
Alembert W. Brayton, Indianapolis.....	1901	1902
John B. Berteling, South Bend.....	1902	1903
Jonas Stewart, Anderson.....	1903	1904
George T. MacCoy, Columbus.....	1904	1905
George H. Grant, Richmond.....	1905	1906
George J. Cook, Indianapolis.....	1906	1907
David C. Peyton, Jeffersonville.....	1907	1908
George D. Kahlo, French Lick.....	1908	1909
Thomas C. Kennedy, Shelbyville.....	1909	1910
Frederic C. Heath, Indianapolis.....	1910	1911
William F. Howat, Hammond.....	1911	1912
A. C. Kimberlin, Indianapolis.....	1912	1913
John P. Salb, Jasper.....	1913	1914
Frank B. Wynn, Indianapolis.....	1914	1915
George F. Kieper, Lafayette.....	1915	1916
John H. Oliver, Indianapolis.....	1916	1917
Joseph Rilus Eastman, Indianapolis.....	1917	1918
William H. Stemm, Vernon.....	1918	1919
Charles H. McCully, Logansport.....	1919	1920
David Ross, Indianapolis.....	1920	1921
William R. Davidson, Evansville.....	1921	1922
Charles H. Good, Huntington.....	1922	1923
Samuel E. Earp, Indianapolis.....	1923	1924
E. M. Shanklin, Hammond.....	1924	1925
C. N. Combs, Terre Haute.....	1925	1926
Frank W. Cregor, Indianapolis.....	1926	1927

EXHIBITORS AT INDIANAPOLIS SESSION

Akron Surgical House, Indianapolis, Ind.
American Medical Association (Hygeia), Chicago, Ill.
Aloe Company, A. S., St. Louis, Mo.
Armstrong Co., Wm. H., Indianapolis, Ind.
Betz Co., Frank S., Hammond, Ind.
Blakiston's Son and Co., P., Philalelphia.
Cameron's Surgical Specialty Co, Chicago, Ill.
Columbus Pharmacal Co., Columbus, Ohio.
Depuy Manufacturing Co., Warsaw, Ind.
Deshell Laboratories, Inc., Chicago, Ill.
DeVilbiss Manufacturing Co., The, Toledo, Ohio.
Dick X Ray Co., St. Louis, Mo.
Fischer & Co., H. G., Chicago, Ill.
Hanovia Chemical Co., Newark, N. J.
Hoosier Pharmacal Co., Indianapolis, Ind.
Horlick's Malted Milk Co., Racine, Wis.

(Continued on adv. Page xx)

## THE JOURNAL of the

### Indiana State Medical Association

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.

Editor and Manager

Office of Publication, 406 W. Berry St., Fort Wayne, Ind.

SEPTEMBER, 1927

## EDITORIALS

### OUR PRESIDENT

DR. FRANK W. CREGOR, president of the Indiana State Medical Association, was born in Henry county, Indiana, on July 13, 1873. On his mother's side he is a descendant of Lord Baltimore and the Marshalls of Virginia, a great-great-grandmother being a sister of Chief Justice Marshall. His early education was in the public schools. He graduated from the Indiana University School of Medicine in 1894. He was in the general practice of medicine at Carthage, Rush county, Indiana, from 1894 to 1908, and at Greenfield, Indiana, from 1908 to 1910. Since 1910 and until the present date he has resided in Indianapolis where he has been practicing, making a specialty of dermatology and syphilology. He did post-graduate work in New York City for several weeks on several occasions, and in 1911, again in 1921 and still again in 1925 he did post-graduate work in Vienna, Edinburgh, Paris and Berlin. At present he is head of the Department of Dermatology and Syphilology of the Indiana University School of Medicine. He also is at the present time and has been for the past five years a member of the Judicial Council of the American Medical Association. He is married, his wife being a talented musician, and he has two children. He is a member of the Masonic order and the Christian Church. He has contributed a number of scientific articles for publication. He has taken considerable interest in politics and was elected to the Indiana State Senate from the counties of Rush, Hancock and Madison in 1899, being the youngest man ever elected to the State Senate in the history of Indiana. It was his knowledge of politics that made him such a valuable chairman of the Legislative Committee of our Association. In this capacity he exhibited executive ability, tact, diplomacy and good-fellowship, to say nothing of being willing to work indefatigably. He has aided materially in securing legislation for the improvement of medical practice, medical education, public health and sanitation. In appreciation of this service as well as for his prominence in the medical profession the Association has honored itself in making him its presiding officer.

## FOREIGN BODIES IN THE ESOPHAGUS

There is altogether too prevalent an idea among physicians that if a patient has swallowed a foreign body it probably will pass on through the intestinal tract and out without producing harm. This opinion is based upon the fact that some things that go down into the esophagus really do go on through the balance of the digestive tract and pass out in a natural way without any ill effects, but a word of warning is necessary in view of the frequency with which foreign bodies become lodged in the esophagus and produce great harm if not fatal results. Pointed and sharp objects as a rule lodge, perforate, and prove fatal. Smooth, round objects usually pass without difficulty. Coins are very prone to lodge, though usually in a vertical position so that they allow food to pass. The editor of *THE JOURNAL* once removed by esophagoscopy a quarter that the history indicated had become lodged in the esophagus some thirteen months before. Fortunately it had not produced perforation by erosion of the esophageal wall, but finally it became the seat of a disturbance that resulted in the regurgitation of food, and roentgenography disclosed the cause of the trouble. The favorable results in this case were exceedingly unusual, as Jackson and many other endoscopists have reported numerous instances where a coin has remained in the esophagus but a few weeks before eroding through into the trachea, with serious consequences. Still worse are such sharp objects as pins, tacks, nails, open safety pins and others, though even these sometimes miraculously pass through the entire digestive canal without harm to the patient. Quite recently the editor of *THE JOURNAL* saw a sixteen-months-old child that had swallowed an open safety pin. The roentgenogram showed the pin, point up, just below the cricoid cartilage. Esophagoscopy a couple of hours after the roentgenogram was taken failed to show the pin, and a re-examination with fluoroscope showed the pin passing through the cardiac orifice to the stomach. Three days later the pin passed per rectum. In another instance a child swallowed a comparatively large three-cornered piece of an iron trunk hinge having one edge with razor-like sharpness. A roentgenogram a few hours later showed that the foreign body had passed into the stomach and a few days later it passed per rectum. These cases are exceptional and not according to rule, for there are innumerable cases on record where swallowed foreign bodies of that nature have produced very serious and even fatal results.

The disconcerting feature of these cases is that the patient's statement is often misleading, inasmuch as the foreign body is not found, and if not is referred to a region where it is not retained. The point to be emphasized is that it is erroneous and dangerous to make light of a patient's fears when he thinks he has



swallowed something, and to advise him that if it has gone downward it will continue going until it passes out without any harm. Some things will go on down and out, but others will not. Furthermore, in consideration of the brilliant achievements of esophagoscopy in the removal of foreign bodies from the esophagus, it is time, as Jackson well says, "to pronounce the prevalent use of the sound, the vertebrated forceps, the corn catcher, the bristle and the sponge probang obsolete, dangerous, unsurgical and thoroughly unjustifiable." There are numerous cases on record of fatal results following their use, and there are many times as many cases that never have been reported. If a foreign body in the air or food passages is suspected, the case should be sent to a first-class roentgenologist and plates made, the pictures being taken in front and side directions. Even a negative plate should not be considered the last word if the symptoms strongly suggest the presence of a foreign body. While it should be remembered that the production of the radiographic shadow by a foreign body is a matter of the density of the foreign substance, yet the fact remains that the developments of roentgenography have reached that stage where various substances, even those of vegetable origin, known to be less opaque, show to the skilled roentgenologist a shadow that may be interpreted. Finally, as stated by Jackson, "sooner or later, if not removed, a foreign body in the esophagus causes death. It may be tolerated for a long period of time, causing abscess, cervical cellulitis, fistulous tracts, and ultimately extreme stenosis from cicatricial contraction. It may prove quickly fatal from hemorrhage due to perforation of a larger vessel, from asphyxia from pressure on the trachea, or from perforation and septic mediastinitis." The prognosis, therefore, must be guarded as long as the intruder remains in the body.

#### FOCAL INFECTION

We haven't much patience with the physician who talks about focal infection without making an exhaustive examination to determine where it is located. Teeth, tonsils, and accessory sinuses of the nose perhaps furnish the most fertile field for infective material which if absorbed by the individual with lowered resistance may cause a variety of pathological disturbances. A roentgenographic examination by a well-trained roentgenologist is necessary to determine with certainty the condition of the roots of teeth and the accessory sinuses. Transillumination of either may be suggestive, but there are many conditions which will alter the reliability of transillumination. Since the last epidemic of influenza we have had to deal with a large number of latent infections in the accessory sinuses, and oftentimes these infections are not evidenced by purulent discharge that can be detected by intranasal examination, but the condition of the sinuses, in-

cluding the mucosa, is determined with reasonable certainty by good roentgenographic plates. Ventilation and drainage in these cases often works wonders, and even ventilation alone has cleared up many painful affections that some of our writers in recent times have attributed to what they call negative pressure within the sinuses. The size and appearance of the tonsils also may be deceptive, insofar as indicating that the tonsils are a source of infection from which toxemia arises. We have in mind a young woman suffering from rheumatism who had been examined critically by one of the best internists in the country, the final decision being to have two very small apparently harmless tonsils enucleated. Even the throat specialist to whom the patient was referred questioned the propriety of the operation, and yet on the recommendation of the internist the tonsils were removed. Even though very small the fibrous tonsils when cut open presented small pockets of infection which upon examination proved to be streptococcic in nature. Three years after the operation the patient reported herself as having been entirely well from the time of the operation. Another case, a young man suffered from recurring attacks of iritis, and exhaustive examinations by competent physicians failed to locate the cause. Two very small apparently clean tonsils were ruled out, but finally enucleated on suspicion. The bacteriologist reported that the tonsils contained streptococcic infection. The patient made a satisfactory recovery and has been free from iritis for several years. An apical tooth abscess that gave the patient no particular trouble referable to the teeth, has been known to be the cause of an arthritis, an iritis, or some other inflammatory condition through toxemia. What is true of focal infection in teeth, tonsils and accessory sinuses of the nose, the most prolific source of focal infection, is also true to a large extent of focal infection in other portions of the body, notably in the intestinal tract, kidneys, bladder, and even the prostate.

In the study of cases a snapshot diagnosis is unwarranted, and a careful study of the clinical symptoms and the probable sources of infection is essential. An ocular inspection alone will not suffice to settle the diagnosis of focal infection in the head. Furthermore, it should be remembered that there may be more than one focus of infection and all must be removed before the most satisfactory results can be obtained from the treatment.

#### OUR ASSOCIATION AND ITS ACTIVITIES

Every physician in Indiana ought to be proud of the Indiana State Medical Association which at the present time is functioning in every particular better than ever before. One needs

only to read the reports of the officers and committees, published in this number of *THE JOURNAL*, to appreciate the fact that something constructive and tangible is being accomplished in the interests of the medical profession, and to promote progress as it pertains not only to the individual physician but the public as well.

Our executive office has furnished the steam that has propelled numerous enterprises that have functioned throughout the last year or so in a most satisfactory way. One of the most important and valuable activities of the headquarters office has been the work of the Bureau of Publicity, which, broadly speaking, has attempted and in a large measure succeeded in educating the laity of Indiana concerning many problems of individual and community health. Each week the bureau prepares and releases an article on some phase of individual and community health, written in a layman's language and so that a layman can understand, which is offered to the newspapers and periodicals throughout the state for publication. Beginning in a small way with a few papers that accepted these releases, the Bureau now is noting that not only nearly all of the newspapers throughout the state are accepting and printing these articles, but actually asking for them. The Bureau also has joined with other agencies throughout the state in aiding the educational work pertaining to personal and community health by furnishing the speakers for various lay meetings, and conferring with officers and committees of various organizations concerning health problems. Not the least important of the Bureau's work has been its expose of notorious frauds and placing the seal of disapproval upon quacks and medical exploiters and pretenders of various kinds. The Better Business Bureaus of many cities and towns over the state have grown to look to the Bureau for trustworthy information concerning pretenders and quacks. Even the periodic health examination propaganda has been carried to the laity by publicity in the daily papers through one of the releases of the Bureau. Of direct benefit to county medical societies is the work of the office in furnishing medical speakers when called upon to do so. Not infrequently a county medical society desires to have an outsider present some medical or surgical subject in an address or a paper, and the headquarters office is in a position to supply the want. Then there is the ever-increasing work connected with organization matters, including keeping the fires burning under county medical society secretaries so that the county organizations function and serve a useful purpose in furthering progressive medicine.

Special credit should be given to councilors and the members of various committees that have worked diligently throughout the year in caring for the duties of office. The work of the legislative committee was of exceptional merit, and what

it accomplished is now past history. A new medical law was secured that really "has teeth in it," and which ought to make suppression of quackery easier than ever before. The man who is licensed to practice medicine in Indiana now must have a knowledge of the basic sciences of medicine, and that is something that never was required before. A very large number of the individual physicians of the state were in Indianapolis at the call of the legislative committee in helping to secure this much-needed legislation.

The Committee on Civic and Industrial Relations has done no constructive work throughout the year but served a very useful purpose in arbitrating differences in connection with the bills of physicians for services rendered in industrial cases and which were a matter of friction through disagreements with employers and insurance carriers. In every instance the committee has been able to effect settlement that seemed eminently fair to all parties concerned, and this goes far toward creating better feeling on the part of all those who are connected with industrial work that heretofore has occasioned much wrangling and unpleasantness in order to effect settlement of compensation.

The Diphtheria Committee has aided the State Board of Health in its effort to secure the widest possible use of toxin antitoxin as a preventive of diphtheria. This has been accomplished by interesting various civic organizations, by lectures to lay audiences, by the distribution of literature, and securing the co-operation of local physicians and local health officers in securing funds for the expense of immunization of indigent children.

The medical defense feature of our Association is functioning in a very satisfactory manner, and is one of the enterprises of our Association of which we should be proud. For seventy-five cents per year every member of the Association is defended in malpractice suits. The enterprise was established many years ago and has never required a greater expenditure than the assessment mentioned. The reserve in the medical defense fund long since has reached the limit prescribed by the constitution and by-laws, and at present the surplus is being returned to the general treasury. At no time during the operation of this enterprise has any member of the Indiana State Medical Association been denied medical defense at the expense of the Association if entitled to it. So far as we know, there isn't a state medical association in the country that can make as good a showing.

Favorable comment could be made concerning the work of any of the officers or the committees that have had anything to do with the Association's affairs, for there has been so much activity and so much constructive work undertaken that we feel disposed to give a great deal of credit to every one to whom work has been delegated. What



has been accomplished is worthy of approval and should make every member of the Association proud that he belongs to such an organization.

### CAPITALIZING PERIODIC EXAMINATIONS

If physicians, all over the country, do not wake up to the possibilities and necessities of periodic physical examinations quite suddenly they will find that, when they do turn over sleepily and begin to rub their eyes, someone else will have run off with all the cake and jam.

The people are beginning to *want* health surveys, and when that happens there will be no lack of those who are eager to give them "something just as good." And if *we* don't tell them the difference they will believe that the commercial substitute really is just as good—to their undoing, perhaps.

A good many people believe that a urinalysis is all that is needed to find out what is going on in their insides. Several life insurance companies are now offering that service, gratis, to their policy holders. Here in Chicago an organization has been formed which offers to make several urinalyses for its "members" yearly—at a charge of \$10 to \$15 a year. This "Bureau" is advertising its services in *Physical Culture* and similar publications which are ready to exploit all sort of quackery, and a good many otherwise sensible people are paying good money for their "reports."

In the first place, it should be remembered that, for a urinary report to be of any value to anyone the tests must be made by a thoroughly competent and reliable person. When specimens come in by wholesale, from people who are known merely by numbers, the temptation to make the time-(dis)-honored "sink test" must be very strong—especially when it is purely a commercial proposition.

In the second place, there are many serious and insidious maladies which may advance to an irremediable stage without showing any evidence in the urine. A *complete* examination is the only reliable health survey.

The public should be promptly and thoroughly informed on those two points.

The ideal person to make periodic health examinations is the family physician, provided he has made the not excessive effort necessary to do it properly. He knows the man's family, history, and personal peculiarities and can evaluate his findings intelligently. If his patients are satisfied with a urinalysis (which they should *not* be) their own doctors can make it just as accurately and probably far more reliably than it will be made by any "Institute" or "Bureau," and the cost will be more in proportion to the value of the services rendered.

The alarm clock has gone off! If we don't get up and *get busy*, for heaven's sake, let's not

"bellyache" about the "serious economic difficulties of the country doctor" when someone else walks off, unhindered, with what is properly ours! —*Clinical Medicine and Surgery*, August, 1927.

### MEDICAL EXPERT TESTIMONY

"It is hoped that the committee appointed by the American Medical Association to confer with representatives of the American Bar Association concerning expert opinion evidence will result in some much needed reforms in the matter of expert medical evidence as submitted in court. At the present time expert medical testimony is thought by the public to be largely worthless through the conflict of opinions that seemingly are biased as a direct result of the fees paid by those who employ the witnesses. Undoubtedly there is much truth back of this opinion, and we sincerely hope that there may be a way out of it by the adoption of some plan whereby unbiased expert evidence can be produced by the court."

This is an editorial note from "THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION."

The editor of this excellent medical journal in another editorial, in the same, January, issue, in speaking of a murder trial, in which some "reputable medical witnesses" testified that there was such a thing as "episode insanity," which, according to their logic, is a form of insanity that comes on rather suddenly, and during which a man may commit a crime, were opposed by other medical witnesses, "also very reputable," who testified that the so-called "episode insanity" was nothing more than a plain drunk, remarks: "Is it any wonder that the newspapers are laughing at the medical profession because reputable medical men are on opposite sides of the fence in a discussion of such a subject as the effect that alcohol has upon the morals and actions of a man? We don't believe that there would be disparity of opinion among reputable medical men when testimony in court trials is solicited by the court rather than by the attorneys for the prosecution or the defense."

I fully agree with the esteemed editor of this Indiana Medical Journal.

But, let me ask: What is the medical profession at large doing to remedy this evil?

Has any one of these so-called "reputable medical men" been called before their medical societies to defend their statements made in court under oath, before juries consisting of laymen, when these statements were against all present knowledge of medical science and not in accordance with any medical authorities?

While the American Medical Association evidently acknowledges that in the matter of taking expert medical testimony reforms are much needed, I would like to be informed what, if any, steps the American Medical Association has

taken to reform its own members as to the manner in which they give such testimony, when they have sworn to tell the truth, the whole truth and nothing but the truth and then proceed merrily to camouflage the truth, hide the truth, pervert the truth until justice would be obliged to wipe the tears out of her eyes, were it not for the fact that the blindfold so readily absorbs them.—*Medico-Legal Journal*, Feb., 1927.

#### PARESIS AND ATAXIA CURED BY MALARIAL TREATMENTS

Paresis and locomotor ataxia no longer are incurable diseases, according to a statement issued by Dr. Max A. Bahr, superintendent of the Central Indiana Hospital for the Insane.

The two dread diseases have been thwarted, he declared, by inoculating sufferers with malaria fever germs. The medical profession has known of the method for several years, but has hesitated to make a definite announcement that the diseases could be cured. Experiments at the Central Hospital within the last few months have shown, however, that the diseases are not merely "arrested" in their ravages, Dr. Bahr said, but indicate that after a course of malarial treatment those patients who were not in a very advanced stage of one or both of the diseases, are completely cured.

Two years have elapsed since such treatment was first inaugurated experimentally at the hospital by Dr. Bahr. He now has 150 paretics under treatment and expects the majority of them to recover.

The last annual report of the institution gives figures on sixty cases, the first under treatment. Of this number 23.33 per cent were "full remission," (completely cured and discharged from the institution); 11.67 per cent, "moderate remissions"; 26.67 per cent slightly improved; 30 per cent unimproved; and 1.67 per cent died during treatment.

"We feel that this is a remarkable record," the doctor declared. "To be able to restore to health a diseased brain that formerly was considered incurable is somewhat of a feat. Our figures compare very favorably with similar statistics issued recently on 100 cases similarly treated by Mayo Brothers in Rochester, Minn. Our institution was the pioneer in this work in the middle west and we are very much pleased with the progress already made."

The World War brought forth the first experiments to cure paresis with malaria germs. Diseased soldiers sometimes were quartered for quarantine in low places where malarial mosquitoes soon infected them. It was noted that after their recovery from the high fevers engendered by malaria, oftentimes the paresis had been arrested or cured.

This discovery brought about experiments by Vienna doctors with malaria inoculations, which have resulted in development of the method now in use.

Charts in Dr. Bahr's office show the record of each patient during the malaria period. Ten or twelve times the fever is permitted to rise to 104 and 106 degrees. Then quinine is given and the patients recover. That is why malaria is used rather than typhoid or other fever producing germs. It always can be controlled by the quinine.

Paresis is a third stage disease of syphilis and has appeared from eighteen months to thirty years after infection with the latter, Dr. Bahr explained. Complete cures are usually made in earlier stages of the paresis, but when the brain tissues have been destroyed nothing can be done to replace them. In such cases the malaria treatment can only halt further inroads of the germs.

Doctors throughout Indiana are taking great interest in the malaria treatment and are using it on first and second stage patients with equal success, according to Dr. Bahr. A report on the progress at Central is now being prepared for publication in the *American Journal for Nervous and Mental Diseases*. Letters asking information have been received by Dr. Bahr from all over the world.—*United Press*, August 15, 1927.

#### EDITORIAL NOTES

##### DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

THE TIME: Wednesday, Thursday and Friday, September 28, 29 and 30.

THE PLACE: Indianapolis, Indiana.

THE EVENT: The annual session of the Indiana State Medical Association.

Do not neglect to take your membership card to Indianapolis with you as it will be required when registering.

THE Indianapolis Methodist Episcopal Hospital has received a bequest of \$15,000, by the will of Mrs. Rebecca Cloud, of Lebanon.

WHAT has become of all the high frequency outfits that used to clutter up the offices of about two out of three doctors in every town?



AGAIN we are publishing a list of the presidents of the Indiana State Medical Association from the founding of the Association up to and including the present date.

THIS number contains the completed and official program for the Indianapolis session. Read it carefully and go to Indianapolis prepared to take part in the discussions.

OFFICERS of sections and others presiding at various meetings of the Indianapolis session are reminded that every meeting must be called on time, and those who take part in the programs should be informed that they will be limited to the time set for their use.

WELL, this is the typhoid season and how many Indiana doctors are urging people to have typhoid vaccination? Incidentally we might ask how many Indiana doctors are going on their vacations into the highways and by-ways without typhoid vaccination as an insurance policy.

THE Columbia Phonograph Company now is marketing phonographic records illustrating the normal and abnormal heart sounds. These records ought to be very useful in teaching students, and also may help some practitioners in regular practice to recognize abnormality of heart sounds.

DON'T forget that the opening entertainment at this year's session of the Indiana State Medical Association is going to be something unusual and exceedingly interesting—"The Medical Follies." We suspect that it will be something like a grid-iron dinner, plenty of roasts—no toasts. Don't miss it!

REPORTS indicate that the attorneys employed

in the Chaplin divorce action received \$150,000. The attorneys for Mrs. Chaplin are said to have been allowed \$50,000 for their services. Such fees make fees of physicians look puny. Who wouldn't be a lawyer when such rich picking as that in the Chaplin divorce action is not uncommon.

"DOCTOR ——— is out of the city attending the Indiana State Medical Association convention in Indianapolis." Such is the wording of a card that may be pinned on your door when you go to this year's session of our Association. It is a good plan to let your patients know that you are progressive enough to attend medical meetings.

It is reported that the assistant surgeon general of the U. S. Public Health Service announced recently that infantile paralysis is unusually prevalent in some states. For the week ending August sixth, reports indicate that 192 cases had occurred in eight states. For the corresponding week last year, thirty-eight states reported sixty-six cases.

A YOUNG woman patient told the editor of THE JOURNAL quite recently that she had been taking chiropractic treatments for too frequent menstruation, and that she felt that she was very much improved as she had n't menstruated for three months.

Perhaps it would be pertinent to make inquiry as to just what kind of treatment was employed.

WITHIN the last month we have had six or eight letters addressed to us upon which additional postage was required, and in each instance the letter was of an advertising nature and of no interest whatsoever. Even if interested we believe that we would be justified in refusing to patronize a firm that asks us to pay for the privilege of being interviewed.

### The Following Prominent Physicians From Out of the State Are On the Program for the Indianapolis Session:

HUGH CABOT, Ann Arbor, Dean and Professor of Surgery, University of Michigan.

HENRY CHRISTIAN, Boston, Professor of Theory and Practice of Physics, Harvard University Medical School.

JULIUS H. HESS, Chicago, Professor of Pediatrics, University of Illinois College of Medicine.

W. T. BOVIE, Chicago, Council on Physical Therapy, American Medical Association.

MORRIS FISHBEIN, Chicago, Editor of the Journal of the American Medical Association.

F. C. WARNSHUIS, Grand Rapids, Secretary of the Michigan State Medical Society.

EDWIN W. RYERSON, Chicago.

WILLIAM MITHOEFER, Cincinnati.

ROBERT VON DER HEYDT, Chicago.

*HYGEIA*, the lay health magazine published by the American Medical Association, deserves a better fate than to be ignored by a very large proportion of the regular physicians of the country. Physicians ought to encourage their patrons to subscribe for *Hygeia*, and as a matter of good reading for the physician's reception room a copy of *Hygeia* is indicated.

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IT WOULD be interesting to know how many Indiana physicians are advocating and carrying out physical examination of the apparently well. Every physician in general practice should take the initiative in having his patrons set aside at least one day in the year for a health inventory. This means much in the interests of public health and the increase in longevity.

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AGAIN we desire to call attention to the splendid work being done by our Bureau of Publicity of our Indiana State Medical Association. There are few if any newspapers in Indiana that do not use the bulletins sent out by the bureau once a week. The members can do much to increase the value of the work of the bureau by encouraging newspapers to publish the articles regularly.

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DR. L. SIEBENMORGEN, director of the Department of Health in the Terre Haute public schools, desires to have other medical men who are doing health work in our public schools meet him at the Indianapolis session to talk over common problems, and asks that physicians who are interested shall write him in advance at Terre Haute so that suitable arrangements for a meeting may be made.

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No person except one legally licensed to practice medicine is permitted to use the word "Doctor" within the state of New York, and if found guilty may be punished for fraud or deceit. It is too bad that in Indiana we cannot punish misfits who are parading under the name of doctor though they may be chiropractors, chiropodists, beauty specialists, faith healers, and medical fakirs of every sort and description.

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ST. CATHERINE'S hospital, which is being constructed in East Chicago, is expected to be ready for occupancy late next spring. It will cost \$1,250,000, will be of fireproof construction, finished with terra cotta and stone, will have five stories, with a capacity of more than 250 beds. It is being built under the combined auspices of the Manufacturers Association of the City of East Chicago and the Poor Handmaids of Jesus Christ.

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SIMULTANEOUSLY with the announcement that the Billy Sunday audiences are growing smaller, together with a decrease in the collections, comes the further announcement that the spectacular and

vigorous Billy desires to retire. All of which reminds us that we never have been able to divorce ourselves from the opinion that "Vaudeville Billy" as some people call him, has been more interested in the collection plate than he has been in saving souls.

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A NEW scheme for obtaining money from the easily duped consists in sending a fountain pen to a person whose name has been engraved on the pen, and then requesting the payment of three or four dollars. It is reported that the pens are worth about fifty cents each, but many persons to whom the pens are sent seem to be pleased with the idea of having the owner's name on the pen and they come across with the payment, not thinking about the lack of value.

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AT the present time paved roads lead from Indianapolis to almost every section of Indiana. In consequence many physicians who attend the coming convention at Indianapolis in all probability will drive. We suggest getting a route map and information concerning shortest route and character of the roads, with possible detours, by consulting any representative of the Hoosier State Automobile Association, or writing to the headquarters in Indianapolis.

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It is reported that a man by the name of T. J. O'Doud has been collecting contributions for the national campaign fund of the Anti-Narcotic Crusade of America. A Detroit address is given, but no one seems to be able to give any trustworthy information concerning the Anti-Narcotic Crusade. It is a good plan not to give donations to any cause which you do not thoroughly understand, and above everything else, the donations should not be given to strangers.

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THE Volta Bureau is responsible for the statement that there are now about sixty organizations in the United States devoted to the problems of the hard of hearing. How perfectly ridiculous it is to have so many different organizations attempting to do the same kind of work, duplicating and overlapping in their efforts, to say nothing of wasting an enormous amount of time and money. One good national organization will do more than all of the rest of them put together.

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MASSACHUSETTS is discussing the advisability of distributing calomel ointment by the State Department of Public Health to aid venereal prophylaxis. The controversy hinges upon the question as to whether such practice would not encourage and increase promiscuous sexual intercourse. No doubt the free distribution of calomel by the Board of Health would encourage a lot of amorous young human bucks to take more chances than they do at present, and that is going some!



THE effort to establish a Physicians' Home at the expense of the medical profession seems to have run up against a snag. It has been discovered through investigation that there is no need for such a home and that, anyway, the exploiters are profiting altogether too much through the enterprise. The *Journal of the A. M. A.*, July 30, 1927, is opposing the scheme, and very justly so. Some months ago we also warned the medical men to refuse to contribute to the enterprise.

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MEMBERS of the House of Delegates should remember that they are expected to be in Indianapolis early on the first day of the session (September 28) in order to participate in the first meeting of the House which will be called at 3:00 p. m. in the Assembly Room, City Hospital. The councilors also are expected to be on hand earlier than usual. By convening early these important bodies of our Association can transact the work before them without hurried and ill-advised action.

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It took seven years to convict and electrocute two anarchists in Massachusetts. That is a fine example of American court procedure. Three months should have been sufficient to determine and pass upon the guilt or innocence of those anarchists, and with a verdict of guilty, sentence should have been completed promptly. America may be the land of the free and the home of the brave, but we could add much to the truthfulness of this fine motto if we speeded up all kinds of legal action.

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JACK DEMPSEY's wife is ill and it is said that the cause of her trouble is dieting and an irrational selection of foods in order to retain that sylph-like form so desired by the female sex. It would not be a bad idea for all general physicians to investigate the habits of some of their female patients who are suffering from sickness and various disturbances of the nervous system. It is surprising to know how many fool women and young girls are sacrificing health in an endeavor to attain beauty of form and face.

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THE American College of Physical Therapy will hold its sixth annual meeting at the Hotel Sherman, Chicago, October 31 to November 5. Three days will be devoted to a school of instruction; one to sectional meetings, one to a joint session and one to hospital and dispensary clinics. The fee for the instruction is ten dollars, and a registration fee for non-fellows to the assembly is five dollars. Information may be obtained from the American College of Physical Therapy, Suite 820, 30 North Michigan Avenue, Chicago.

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THE members of the Indiana State Medical Association who are interested in golf are reminded

that a golf tournament will be held in connection with the Indianapolis session. It will be at the Indianapolis Country Club and will start at 1:30 on Wednesday afternoon, September 28th. The entertainment committee requests that we place special emphasis upon the invitation to take part in this tournament. Some fine prizes have been secured for the winners, and it is hoped that a large number of physicians will enter the contests.

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WHEN a physician gets through attending the meetings of four or five national medical societies that hold their conventions as widely separated as San Francisco and Washington horizontally, and Quebec and New Orleans vertically, and then winds up by attending a convention of his State Medical Association and one or two special medical societies in the state, he begins to think that there are too many societies or that he is too ambitious. In fact we could do without some of the societies like we could do without some of the superfluous medical books that are published.

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ALMOST every hospital has its "Knockers Club" composed of physicians who visit the hospital and who congregate in small groups some time during morning visiting hours to discuss the peculiarities and failures of confreres. Sometimes these discussions and attending criticisms are friendly, but more often otherwise. Wouldn't it be a good plan to revise the tactics of not a few of the physicians who are regular visitors at hospitals so that less unfair, damaging and uncalled for "knocking" will be indulged in. "Do unto others as you would be done by" would be a good motto to hang in the doctors' loafing place in every hospital.

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THE typhoid situation in Montreal does not seem to improve. Either the health officers are derelict in duty or they haven't the machinery with which to operate. At all events Montreal suffers and will continue to suffer for a long time to come. Eventually the merchants, the hotels, railroads and people generally will come to the conclusion that it pays to have an efficient regulation of health and sanitation. In the meantime the residents of the United States will do well if they steer clear of Montreal even though they may be fearfully thirsty. If they must go there then they should submit to typhoid vaccination before going.

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THE Protex Products Company, of Richmond, Indiana, said to be owned and managed by one signing himself "Dr. G. J. Grosvenor," is exploiting Protex Powder and Protex Cones which while called antiseptic for general purposes are especially recommended to girls and women for use as a vaginal antiseptic. A specious plea for the use of powder or cones is made in a pamphlet

entitled "Personal Hygiene," and upon the cover of the pamphlet is announced "Health Secrets for Women." We are under the impression that the post office department should investigate the operation of this concern which no doubt is duping many customers of the female sex.

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INDIANA, once the pride of America's fruit, has turned into a rotten lemon. So says the *Chicago Tribune*, and backs the assertion by pointing to McCray, Jackson, Stevenson, Shumaker and the Ku Klux Klan. While we admit that we have produced some bad actors in public life, we also have produced some good ones, and the latter far outnumber the former. However, while we are on this subject, what has Illinois to brag about, and what can Chicago say about herself that is at all pleasing when it comes down to the discussion of rotten lemons in public life? The *Chicago Tribune* has enough ammunition right at home to use without coming over into Indiana.

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THE private secretary of a bachelor doctor in New York unexpectedly found herself heir to an estate worth more than a million dollars. Her employer immediately proposed to her, and she very logically informed him that inasmuch as he had not noticed her during the many years she had been in his service it was quite evident that he now only noticed her because she had become rich, and consequently she did not care to give his proposal consideration. She probably will marry some chap who hasn't brains enough to run a chickadee and who scarcely knows where the next meal is to come from but who can dance divinely and who parts his hair with axle grease. However, the doctor got what was coming to him.

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A NEWSPAPER cartoon conveys the suggestion that among "uncrowned kings" should be included the eye specialist who, after examining you, tells you that you do not need glasses. We quite agree with the sentiment if it applies to the opticians or so-called optometrists who claim to make examinations free. The physician who makes a specialty of eye diseases and charges for his opinion, not only considers the question of the need of glasses but the condition of the eye from a medical standpoint as well, and there is no occasion for comment concerning simple honesty in the advice that may mean the saving of money for the patient. He is paid for his advice whether good or bad, and there is no temptation to give advice merely for the pecuniary gain derived.

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AN effort is being made to bring the 1928 convention of the American Public Health Association to Indianapolis. The Association has not met in Indianapolis since 1900. An opportunity presents itself for Hoosierdom again to entertain this splendid assemblage of scientists and social workers in 1928. With proper support, an invi-

tation to meet next year in Indianapolis will prove successful. From the standpoint of stimulus to public health work in Indiana, nothing could be of greater value than a meeting of the American Public Health Association in our state capital. The most recent phases of progress in the nine sections of activity of the Association will be announced and commented upon by men recognized as authorities throughout the world.

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WE are pleased to think that we have not been asked to endorse the cigarette that is so extensively advertised as not harming the throat. Our testimony might not be so flattering as some of those published in the lay press. It is rather remarkable with what ease testimonials concerning most anything may be secured. This idea that a single well-advertised cigarette is less injurious to the throat than cigarettes of other manufacture is all high-pressure selling propaganda and not worth serious consideration. We know, because for many years we have smoked the particular brand of cigarettes under consideration and some of our friends are willing to join us in testimony directly opposite to some of that offered by the manufacturers in their advertising.

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PRESS reports carry the announcements that two Indiana surgeons have had to settle for leaving foreign bodies in the abdomen after an operation. In one case a rubber tube, with safety pin attached, was sewed up in the belly, and in the other a pair of hemostatic forceps met a like fate. Perhaps we should not say that such accidents are inexcusable, but we do say that when the patients were not doing well x-ray pictures would have told the story and the foreign bodies could have been removed without much trouble and without leaving the patient a just cause for malpractice. It is quite true that most of the malpractice suits have no reasonable basis of action, but, on the contrary, there are altogether too many malpractice suits that are justified and may be avoided if the surgeon or physician uses ordinary care in every phase of his work in connection with a given case.

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IT HAS been our experience that quality always costs more but is the cheapest in the end. Our attention has been directed to this subject by the circularization of Indiana physicians by a cut-rate physicians' supply house that offers to send drugs and instruments at prices less than usually charged by trustworthy firms. Some of our readers have complained that both the drugs and the instruments furnished by this cut-rate supply house are not up to standard, and we feel disposed to say that it serves any physician right when he expects to get something for nothing. Generally speaking you have to pay more for



quality no matter whether it is surgical instruments, merchandise, or service of any kind. If you always are trying to see how cheap you can buy a thing you can depend upon it that you will be cheated more often than you will profit. It does not pay to buy because a thing is cheap.

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THEY tell it on an Indiana doctor, but probably the first person who reads this story will say that it is an old one. Coming from Montreal, just before the holidays, the doctor thought he would try to get a quart of good whiskey across the border without having it confiscated by the revenue officers. Assuming that most of the revenue officials are susceptible to bribery he attached to the quart bottle of whiskey a five dollar bill and a note, the latter reading, "Merry Christmas. Have a heart," and then left the bag with the whiskey in it for inspection while he kept at a safe distance in the smoking room. After the revenue officer had finished his inspection the doctor went back to see what had happened, and upon opening the bag found *two* bottles of whiskey instead of one, and in place of the five dollar bill was a note which said, "Happy New Year. I snitched this other quart bottle from the stingy guy across the aisle."

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VERY frequently we see newspaper accounts of suits for malpractice in connection with the treatment of fractures, and in the complaint it is alleged that the attending physician neglected to have a roentgenographic examination. It would be well for every practicing physician to remember that many courts have decided that any physician attending a case of injury in which broken or misplaced bones are suspected is liable for damages if he does not resort to the use of the X-ray to determine the extent of the bone injury or misplacement as well as to determine the results of surgical or other treatment. Here in Indiana we now have two malpractice suits in the courts in which the allegation is made that the fractures were reduced without the use of roentgenography to determine either the extent of the injury or the condition after treatment. It is about time for some physicians to wake up to the necessity of employing roentgenography in such cases.

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SOFT mattresses and downy pillows do not always give an infant comfort, whether the infant is sick or well. Sometimes crying and uncomfortable babies will cease to fret when they are taken from such a bed and are put upon a hard table. The reason for this is that soft bedding does not give the proper support and it produces cramped muscles as the result of uncomfortable positions which the infant is unable to change. Soft bedding also acts as an insulator, retaining heat that should be radiated and so contributes to make the infant wretched. Such error in technique may have a very grave influence on the fevers

of infancy, especially on those which are associated with the respiratory tract infections. It should be remembered that an excess of clothing is harmful to babies as well as to grown-ups. Many a sick child is insulated with pneumonia jackets, extra jackets and comforters, heavy underwear, and is denied the advantages of tepid baths, packs, and other valuable anti-pyretic measures—*The Sick Infant*, by Porter and Carter.

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IF you desire a minimum rate at a hotel where you intend stopping it is a good thing to ask for that rate when applying for accommodations. However, you will be surprised to note the frequency with which the hotel clerk will tell you that all of the minimum rate rooms are occupied, no matter if no guest has been assigned to such rooms within the preceding year. In short, most of the hotel clerks are instructed by the proprietor to fill up the high-priced rooms first, and it is only when the guest shows a disposition to go somewhere else that the clerk will, ostensibly by means of much hunting, find medium-priced accommodations. Well, like all other commercial enterprises, hotels are out to make money, and why shouldn't they try to dispose of their best goods? Incidentally, a majority of the doctors who attend conventions are not in their rooms very much anyway, and can dispense with some of the frills, so if any measure of economy is to be practiced it would be well to make a bargain with the hotel clerk at the time of registering.

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THE editor of THE JOURNAL has received a letter from a preacher patient of his in Peoria, Illinois, which begins as follows: "It may be news to you to learn that on July 13th our dear son Robert went to be with the Lord. He developed tetanus from a small wound received on the Fourth of July while playing with a neighbor boy's toy pistol. On July 11th we took him to a hospital and on the 13th he was gone." Thus another link is added to the chain of evidence indicting the need for the prohibition of the sale of explosives for celebrating the Fourth of July. For many years the medical journals, led by the *Journal of the A. M. A.*, have been advocating the prohibition of the sale of fireworks, and in particular the toy pistol, for the reason that so often injuries from them result in tetanus. Much good has been accomplished, but as evidenced by the case here mentioned the death toll continues, and it will continue until our law-making bodies see fit to make it impossible for so many serious and even fatal injuries to occur.

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WISCONSIN has some new motor laws that Indiana might copy. For instance, automobilists must drive on the right side of the highway, and the driver of a slow-moving vehicle must drive as close as possible to the right-hand curb of the highway. It should not be necessary to tell people

to follow these rules, for they ought to do it naturally and voluntarily. Yet they will hug the middle of the road. Try to pass them and they grudgingly pull over a bit but that is all. Instead of driving to the right they stick to the road center, and they are worse in cities than in the country. Accidents on the highways or trouble on the road isn't for lack of laws but for lack of consideration on the part of drivers. Speed has little to do with it. A good driver at high speed is less dangerous than a reckless driver at slow speed. It is the man who "hogs the road," who makes careless turns, who doesn't watch intersections, who is reckless of the rights of others that makes motoring unsafe. Punishment of a few of the offenders will have a salutary effect in bringing about more safety in motor driving.

ON several occasions we have tried to become interested in psychoanalysis by reading some of the latest contributions on the subject, not omitting one or two fairly well known books that discuss it in a supposedly comprehensive way. In all probability the dyed-in-the-wool psychoanalists will charge us with being just plain dumb because we can see nothing consistent nor logical in the arguments advanced by this new school of thinkers. We believe that psychoanalysis may be profitable to play with in connection with the management of a few neurotics who can be impressed as much with the theory that the moon is made of green cheese as they are with the assertion that their physical and mental balance is disturbed by some form of suppression. In fact, to come right down to brass tacks, we have an idea that the majority of logical thinkers in the medical profession have about the same opinion that we have, which in effect is that for the most part psychoanalysis is pure rot. Most of the stuff written concerning psychoanalysis puts us in mind of some of the nebulous and intangible writings of Mrs. Mary Baker Eddy. There is just about as much good in psychoanalysis as there is in Christian Science, and mighty little of practical value in either.

YES, we had that fishing trip. It was in Canada, 125 miles from civilization. No railroads—no flivvers—no saddle-horses—but the trip made by canoes through innumerable lakes and over twelve or fifteen portages, two of which were nearly a mile in length through the woods. Canoes and supplies were carried over the portages by two sturdy guides, and the editor and his wife were not excused from the duty of helping carry some of the heavy luggage. The camp, on a lake in a region where there are dozens of lakes, some of which probably have not been explored, was comfortable. Moose and deer were seen every day as they came to the water's edge to eat the tender roots growing under water, and to drink their fill. Fish in plenty! Black bass, pike,

muskellunge, and lake trout to our heart's content. The crying loons and hooting owls at night did not disturb sound sleep. What a vacation! And we pity every physician who does not try to take one like it. Two weeks of it seems too short a time for such wonderful recreation and enjoyment, but we believe that any physician is better for such an outing, as it puts him in better physical and mental condition for his routine work, and it whets his appetite for more like it the coming year.

THE Ross Chiropractic School, of Fort Wayne, seems to be on the verge of complete collapse. Its pretentious building soon will be occupied by a school of music. Ross, the founder of the school, made considerable money by turning out "doctors of chiropractic" in four to six weeks, but in doing so he spoiled some tolerably good barbers, janitors, elevator boys and useful section hands. He sold out when he presumably saw that the business was slipping, and now he is resorting to legal recourse to secure an accounting from an institution that seems to have gone to an ignominious death. Thus, what really was a "diploma mill" is about to utter a last gasp. In a short while we shall hear little about chiropractic itself, but of course there will be something else equally as absurd and ridiculous in the way of a cult to take its place and plea for recognition as a new school for the treatment of the sick and suffering. Likewise there will be the usual number of human suckers to bite at the bait and howl themselves hoarse in an effort to have the "new school" legally recognized and by law permitted to tamper with things about which they will know absolutely nothing. It is natural for some persons to really love to be humbugged. Such persons have had their fill of chiropractic and crave for something new and equally as worthless. When such birds are plentiful and eager to be plucked there always arises a "school" to do the plucking.

TALK about contract practice, here's a good one. In the smoking room of a Pullman car on a western railroad we overheard a man telling a fellow traveler that he belonged to a chapter of the Eagles that had 25,000 members, and that with dues of twelve and one-half dollars a year not only the members but their families were furnished all medical and surgical services without expense. He volunteered the information that at present his fraternity is building a hospital, with the promise to the members that the only expense for service will be the actual cost of hospital maintenance, which would be not exceeding two dollars per day, including room, nursing, food and surgical attention. When asked where he got his medical men, he answered that the organization could get plenty of them on the



small salaries offered, and that whenever a physician or surgeon connected with the enterprise becomes dissatisfied with the salary received he is asked to get out. Naturally, the question in mind was to ask what kind of service is received, but the trend of the conversation indicated so little respect for the medical profession by this Eagle that no further discussion of the subject was encouraged. We would like to know if these contract surgeons are members of reputable medical societies and, if so, why their affiliation is tolerated. It will require but a few enterprises like this to put the medical profession on the defensive like the medical profession of Great Britain, where the medical men have been obliged to unionize in order to secure decent compensation.

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SOME of the church organizations and the Epworth League in Indiana put themselves in a contradictory position when they endorsed the Reverend Shumaker, head of the Anti-Saloon League, and all of his actions pertaining to the prohibition crusade. In other words, church members who supposedly are law abiding and uphold and support respect for law and constituted authority, are endorsing the Reverend Shumaker who comes very far from living up to a high standard of religious and business ethics. In fact, he is in favor of law and constituted authority only insofar as it agrees with his ideas and suits his purposes. If it doesn't satisfy his fanatical notions then he is quite willing to upset it, by force if necessary. There are a great many people in Indiana who are sincerely devoted to the cause of prohibition but who do not endorse the policies of the Reverend Shumaker, and, as stated in numerous newspapers throughout the state, it is very evident that the Reverend Shumaker has in the long run done the cause of prohibition more harm than he has done it good. In fact, we are quite willing to endorse the sentiment expressed by several of the leading newspapers of the state to the effect that prohibition's cause in Indiana would be distinctly advanced by the resignation of Reverend Shumaker from his present position. No great cause has been won by misrepresentation, distortion of facts, and open rebellion against law and constituted authority. If a cause cannot win on its merits, presented openly, fearlessly, and honestly, then it does not deserve to win. Prohibition is worth working for, but it never will win with the tactics employed by Shumaker.

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MISS HARRIET M. CHAMBERLAIN, addressing the delegates to the annual convention of the National School of Cosmeticians, says that "American women spent more last year on the waves of their hair than Uncle Sam expended on his navy on the waves of the sea." The women's hair bill last year was in excess of three hundred and twenty-five million dollars, yet the total expenditure of the United States Navy for that

period was only three hundred and eighteen million dollars. The total bill of the women of the nation for all kinds of beautifying, including marcel, manicures, face-lifts, massages, hair-dyeing and cutting, cosmetics and all of the rest amounts to nearly two billion dollars, says Miss Chamberlain. That is two and one-half per cent of the national income. Not all of the women, God bless them, have to be beautified, but some of the scare-crow women and girls should be beautified, even if it takes the cost of the whole United States Army and Navy and a good portion of private income to accomplish it. However, we cannot let the opportunity pass to say, in the language of a famous cosmetic manufacturer, that our women and girls are buncoed more in the purchase of adornment than are all the rubes who buy gold bricks, or the dupes who put their hard-earned money into worthless oil or mining stock. Not only is the price for most cosmetics extortionate to the last degree, but the use of cosmetics is for the most part very injurious, and when the average girl begins to paint and varnish her skin with these so-called beautifiers she ruins what natural beauty she ordinarily possesses and is forced to rely upon artificiality ever afterwards.

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DR. MORRIS FISHBEIN, the editor of the *Journal of the A. M. A.*, recently has published a book entitled "The New Medical Follies," in which he discusses with brutal frankness the many ways in which the medical profession as well as the public is buncoed. Dr. Fishbein never has been very partial to the rejuvenating theories of Steinach and others, and in *The New Medical Follies* he does not hesitate to express himself as entirely opposed to the theories concerning the possibility of not only controlling old age but rejuvenating those who have lost or are beginning to lose their sexual virility. It so happens that there are a few disciples of Steinach in this country, and they have taken exception to Dr. Fishbein's attack on rejuvenation by publishing in *American Medicine* an address which not only reiterates the Steinach theories but attempts to prove the practical application of the same. Well, we are inclined to take sides with Dr. Fishbein, and up to the present time we have not read nor have we heard of any trustworthy contributions that tend to prove indisputably that the Steinach operation has produced any striking benefit except through temporary psychic effect. The medical profession is perfectly willing to give Steinach or anyone else due credit for any scientific discoveries made, but proof satisfactory to any fair-minded jury of thinkers must be produced before the bare assertion that rejuvenation has been brought about will be accepted. There is plenty of material to experiment with, for there are any number of good-for-nothing old human goats who would be willing to part with the right to their seats in Heaven if they could be rejuvenated, and

we venture to say that not a few of them would throw caution and modesty to the winds by permitting Steinach or any of his satellites to publish the results of any rejuvenating operation performed. In reality, what we need are facts before swallowing the rejuvenating theory which has been offered so alluringly by those who either have been sincerely deceived in their analysis of results or are aiding the enterprise for commercial gain.

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Book agents and insurance men used to be the worst pests on earth, and even at the present time they sometimes are annoying in their persistence to sell something. Within recent months a book agent announced to the office girl of a very busy physician that he desired to see the physician on a very important matter. The physician took the book agent ahead of waiting patients and was surprised to find that his time was to be taken in looking at a prospectus of a well known book. When told that the physician's time at that moment was too valuable to be spent in examining books the agent became insolent and it was only when the physician threatened to throw the book agent out of the window that peace and tranquility was restored. In another instance a busy physician desired to take out a little additional life insurance and wrote the representatives of four well known life insurance companies asking them to submit specimen policies of the type desired. Each and every agent was notified that under no consideration was a personal interview to be solicited, as the specimen policies and all information submitted would be examined at leisure and a decision made from the findings. One agent who figured that he might secure the policy by being a little more persistent, had the nerve to call the physician at meal time, and finally to make a personal call during an evening when the physician was entertaining company in his own home. Needless to say the agent did not sell a policy and would not have sold one had he been the last insurance agent in the world. A busy physician will find the money well spent if he employs a bright, educated, and tactful secretary, one of whose duties shall be to save the physician from annoyance by such chaps as those described. Any person worth seeing by the busy physician will not be offended if he is asked politely to state his business in advance of seeing the physician. Many physicians actually wear themselves out on minor things that can be taken care of by a competent secretary or office assistant, but it should be remembered that the latter must not be of the ignorant, gum-chewing or flapper type.

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Yes, we went to Canada on a fishing trip and not to quench thirst. Canada has no charms for us because it affords any one the legal privilege of obtaining alcoholic beverages. However, we were interested in counting exactly fifty cars lined

up before a government liquor supply house, just across the line, waiting for the morning opening so that the thirsty Americans could load up. Upon inquiry we learned that practically all of the government liquor supply stations just across the border sell ten times as much alcoholic beverages to Americans as they sell to Canadians. Furthermore, we learn from a substantial merchant who travels extensively through the Canadian Northwest that about the only drunken people ever seen in Canada are visitors from the United States. The physician to the king of England, who recently visited Canada and the United States, has given an interview to one of the London newspapers in which he says that Canada has taken a wise step in not adopting prohibition but placing the sale of alcoholic beverages under the complete control of the government through such a satisfactory system as has been inaugurated in both Quebec and Ontario. He claims that England as well as other European nations that have not attempted to adopt prohibition are the most temperate countries on earth, and that the United States right now is very intemperate and suffering more from the ill effects of alcoholism than ever before in its history. Prohibition in the United States never has been and never will be a complete success. We wish that it could be made a success. As it stands now, there is more *injurious* drinking in every city, town and hamlet in the United States than ever before, and worse than all, there never was so much intemperance among young people and even children. No high school fraternity dance is complete without an abundance of liquor, and such a thing was seldom if ever heard of in pre-prohibition days. We cannot suppress the traffic in intoxicants which reach here through the leakage from Canada and foreign ports, even if we spend ten times what we do now in trying to enforce prohibition. Canadians are chuckling, and with good reason, for the sale of alcoholic beverages to people of the United States is immensely profitable for Canada. In fact, as one prominent Canadian official has said, the taxes on booze sold to Americans is paving Canada's thoroughfares with concrete and building Canada's schools. Why shouldn't the traffic be encouraged? Meanwhile we are paying enormous taxes and spending millions of dollars annually in efforts to suppress this traffic when every sensible and sane person who analyzes the true condition of affairs knows that we are butting our heads against a brick wall insofar as getting anywhere is concerned. *The difficulty arises in not being able to check the traffic at its source.*

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## DEATHS

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JOHN STUART, M.D., of Monon, died July 19, aged 81 years. Dr. Stuart graduated from the Barnes Medical College of St. Louis in 1897.



S. G. DOWNING, M.D., of Hobbs, died August 11, aged 82 years. Dr. Downing was a graduate of the Medical College of Indiana, Indianapolis, in 1883.

LEE C. MYERS, M.D. (colored), of Anderson, died recently, aged 41 years. Dr. Myers graduated from the Meharry Medical College, Nashville, in 1913.

JACOB BUROKER, M.D., of Sweetser, died August 8, aged 80 years. Dr. Buroker was a graduate of the Curtis Physio-Medical Institute, of Marion, in 1897.

JOHN F. WEATHERS, M.D., of New Albany, died July 21, aged 66 years. Dr. Weathers had practiced medicine in New Albany for thirty-five years. He graduated from the Hospital College of Medicine, Louisville, Kentucky, in 1886.

W. A. LISMAN, M.D., of Carlisle, died July 27, aged 75 years. Dr. Lisman graduated from Rush Medical College, Chicago, in 1880. He was a member of the Sullivan County Medical Society, the Indiana State Medical Association and the American Medical Association.

H. G. READ, M.D., of Tipton, died July 25, aged 70 years. Dr. Read was a graduate of Miami Medical College, Cincinnati, in 1883 and was a member of the Tipton County Medical Society, the Indiana State Medical Association and the American Medical Association.

J. E. KING, M.D., of Richmond, died July 28, aged 70 years. Dr. King was a former member of his county board of health. He graduated from the Medical College of Ohio, Cincinnati, in 1884. He was a member of the Wayne County Medical Society, the Indiana State Medical Association and the American Medical Association.

### NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

MRS. MARGARET E. COOMES, wife of Dr. M. Joseph Coomes, of Versailles, Indiana, died July 17th.

Dr. and Mrs. Waldo C. Farnham, of South Bend, returned September 10th from a three months tour of Europe.

DR. CHARLES D. HUMES has announced the establishment of his office with his residence at the Spink Arms Hotel, Indianapolis.

THE International meeting of the Inter-State

Postgraduate Medical Association of North America will be held in Kansas City, October 17th to 22nd, with two days pre-assembly clinics in the Kansas City Hospitals.

THE Grant County Medical Society held a meeting August 23rd. The program consisted of five, six, seven and eight minute talks on thirteen different topics. The meeting followed a dinner at the Bonnie Tea House, in Marion.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Lederle Antitoxin Laboratories:

Erysipelas Streptococcus Antitoxin (Lederle)  
Unconcentrated.

DR. A. E. RHEIN, formerly of Rosedale, Indiana, is now doing postgraduate work in Berlin. He has been studying in Vienna for many months and last March was made president of the American Medical Association of Vienna. Dr. Rhein will take up the practice of medicine in Terre Haute when he returns to Indiana.

THE United States Civil Service Commission announces the open competitive examination for Social Worker (psychiatric) and Junior Social Worker. Applications for these positions will be received by the U. S. Civil Service Commission at Washington, D. C., until December 30, 1927. The examinations are to fill vacancies in hospitals of the Veterans' Bureau throughout the United States.

ON Sunday afternoon, September 18th, Sunny-side, the Marion County Tuberculosis sanatorium, will hold its annual home-coming for former patients, and will dedicate several new buildings. These new buildings include a nurse's home, an infirmary building, a medical building, and a second story on the old administration building. These additions will add 100 beds to the capacity of the institution and will enable it to care for 300 patients.

DOCTORS who lived formerly in Illinois, or who are descendants of pioneer physicians of the "Illinois country" will hear with interest that Volume One of the "History of Medical Practice in the State of Illinois" is ready for delivery. The edition is limited and will not be reprinted. Orders may be sent to Committee on Medical History, Illinois State Medical Society, Medical and Dental Arts Building, 185 North Wabash Avenue, Chicago, Illinois. Dr. Charles J. Whalen is the chairman of the committee.

The Thirty-third Annual Conference of Indiana Health Officers to be held at the Severin Hotel, Indianapolis, September 27-28, promises to be of unusual interest and should be largely attended because the conference this year will immediately precede the annual meeting of the State Medical Association and most of the health officers of the state will arrange to attend both meetings. The program of the conference will bring before the health officers of the state many important public health problems for discussion and for co-operation. Among the subjects to be presented and discussed are the following: "Prevention of Communicable Disease by Immunization", "Laboratory Control of Typhoid Fever," "A State-wide Program of Co-operation in Milk Supervision and Control", "A State-wide Program for the Supervision of Water Supplies and Sewage Disposal," "The Development of Public Health Nursing", "Public Health Work in Schools", and "The Prevention and Control of Rabies". There will be round-table discussions upon the duties and responsibilities of health officers and on methods of public health administration. In connection with the discussion of rabies an actual demonstration of administering the Pasteur preventive treatment will be shown. There will be two luncheon meetings, at one of which Dr. Frank W. Cregor, president of the Indiana State Medical Association, will give an address. The conference will begin at ten o'clock on Tuesday, the 27th, and will close with the afternoon session on the following day.

## CORRESPONDENCE

### SHOULD BE ENCOURAGED

Indiana State Board of Health,  
Indianapolis, Indiana  
August, 11, 1927

To the Editor:

The American Public Health Association, representing the official and voluntary health organizations and agencies of the United States, the Dominion of Canada, the Republic of Mexico, and the Republic of Cuba, is the largest public health organization in the world. This Association holds an annual meeting usually in some city of the United States with an occasional meeting in Canada. The Association met in Indianapolis in 1900, and while the Association was much smaller than at the present time, the Indianapolis meeting was one of the most notable in the history of the Association because of the fact that Dr. Walter Reed, of the United States army, gave the first official report of a study of the cause of yellow fever and announced publicly for the first time that yellow fever was transmitted by the *Stegomyia* (*Aedes*) mosquito. The full meaning of this discovery was not apparent at that time, but in the twenty-seven years that have elapsed, yellow fever has been practically eliminated, the Panama Canal has been built, it has become possible for the white man to live in the tropics, and a tremendous economic and social development is now being carried out in the tropical countries of America.

There is an opportunity for Indianapolis and Indiana to again be host to the American Public Health Association meeting in 1928. A meeting of the American Public Health Association brings together national, state, pro-

vincial, county and city health officers of all the countries of North America, leaders in non-official health organizations and agencies, leaders in health education, in laboratory research, in sanitary engineering together with social workers, representatives of industry, medical representatives of life insurance companies, and in fact, representatives of every activity having in any way to do with public health and public welfare. The Association is now divided into nine sections, namely, laboratory, health officers, vital statistics, public health engineering, industrial hygiene, food and drugs, child hygiene, public health education and public health nursing.

A meeting of the American Public Health Association will bring to Indianapolis and to the state of Indiana an inspiration and example that will mean much to the future of public health work in the state, and will advance the cause of public health to a degree not otherwise possible. An effort will be made to bring the American Health Association to Indianapolis in October, 1928, and we wish to enlist support and cooperation in this effort. A meeting of those interested will be called by the Indianapolis Chamber of Commerce in the near future to discuss the necessary arrangements, and an invitation will be issued to all who may be interested in this meeting. I shall be glad to hear from anyone interested in the proposal to have Indianapolis and the state of Indiana profit by the inspiration of this great American Public Health organization meeting in Indianapolis in 1928.

Very sincerely yours,  
WM. F. KING, Secretary.

## SOCIETIES AND INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

July 25, 1927.

Meeting called to order at 4:45 p. m.

Present: William N. Wishard, M. D., Chairman; Murray N. Hadley, M. D., and Thomas A. Hendricks, Executive Secretary.

The minutes of the meeting held July 18 read, corrected and approved.

Letter received from the executive secretary of the West Virginia State Medical Association regarding the work of the Professional Relations committee of the West Virginia State Medical Association. This committee acted in the same capacity as the Publicity Bureau of the Indiana State Medical Association. According to the executive secretary, it functioned in good shape until January 1, 1927. "During the latter part of 1926, weekly publicity articles were sent to all West Virginia state newspapers in regard to public health and disease prevention. During that time a number of excellent papers were written especially for the papers by the members of the West Virginia State Association." Beginning with 1927 little was done, due to the fact that there was a change in the executive secretary. The new executive secretary in his letter of July 21 said that the Professional Relations committee would be functioning once again soon.

The release—"Strenuous Week Ends" read, corrected and approved for release August 1.

The annual report of the Maine Public Health Association was received.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole August 1, 1927.

WILLIAM N. WISHARD, M. D.

Chairman.

THOS. A. HENDRICKS.

Secretary.



## TRUTH ABOUT MEDICINES

### NEW AND NONOFFICIAL REMEDIES

**CROTALUS ANTITOXIN.**—An antitoxic serum prepared by immunizing animals against the venom of snakes of the crotalus family. Evidence has accumulated to show that the venom of certain snakes may be neutralized by the employment of a serum obtained from animals that have been injected with venom from a snake of the same family. Crotalus antitoxin is used to neutralize the venom injected by the bite of members of the crotalus family. The serum is administered intramuscularly, subcutaneously and in certain cases it may be administered intravenously.

**ANTIVENIN (NEARCTIC CROTALIDAE).**—NORTH AMERICAN ANTI-SNAKE-BITE SERUM.—An antitoxic serum prepared by injecting horses with venoms from serpents of the North American species of the family *Crotalidae* (Rattle Snake, 75 per cent; Copperhead, 12½ per cent; and Water Moccasin, 12½ per cent). It is claimed to have neutralizing effect against the venom of the species represented. The serum is marketed in syringes containing 10 cc. (a single dose). H. K. Mulford Co., Philadelphia. (*Jour. A. M. A.*, July 2, 1927, p. 29).

**ERYSIPELAS STREPTOCOCCUS ANTITOXIN (LEDERLE) UNCONCENTRATED.**—An erysipelas streptococcus antitoxin (New and Nonofficial Remedies, 1927, p. 337) prepared by immunizing horses by subcutaneous injections of the toxic filtrate obtained from broth cultures of the erysipelas streptococcus, or by intravenous injection of cultures of the erysipelas streptococcus obtained from typical cases of erysipelas. It is administered in early cases of moderate severity in dosage of 12 cc. intramuscularly; in severely toxic and late cases, 36 cc. to 48 cc. intramuscularly, or 24 cc. to 36 cc. intravenously. This product is marketed in syringes containing 12 cc. Lederle Antitoxin Laboratories, New York. (*Jour. A. M. A.*, July 30, 1927, p. 373).

### PROPAGANDA FOR REFORM

**DISGUSTING MEDICAL ADVERTISING.**—The medical profession is now being circularized with an illustration advertising presumably "Proveinase-Midy." The circular shows a disproportionate naked Hercules and a depressed naked female, whom the Hercules seems about to energize with "Proveinase." The name Midy has meant little that is inspiring to the American medical profession. Santal-Midy is sandal oil capsules that have been exploited largely by way of posters in public toilets. The advertising of "Proveinase" merits contempt and resentment. (*Jour. A. M. A.*, July 2, 1927, p. 32).

**NATIONAL MEDICAL BUREAU, INC.**—Physicians have been circularized by the "National Medical Bureau, Inc." The letterhead of this concern carries with it the idea that it is a nation-wide organization having offices in New York City, Chicago and Los Angeles, with a "Division Office" at South Bend, Ind. The circular letter which the "Bureau" sends to a physician states that it is about to appoint a physician in his locality to care for its members. It explains that the appointee would receive remuneration for his services and he is told that if selected, he would automatically be made the family physician in more than 500 homes of the city. Investigation showed that all correspondence was handled from South Bend, Ind., by one A. M. Nadel who did not divulge the names of the incorporators. The Indiana Department of State declared that it had no record of the National Medical Bureau, Inc. (*Jour. A. M. A.*, July 2, 1927, p. 49).

**"APOCACTIN" AND "PASCONIA" MERRELL.**—The Wm. S. Merrell Co. suggests to a physician that he consult the firm's catalogue for "the particular kind of remedial agents for the different pathologic conditions met in daily practice." As an illustration of the advice that may be

had from a perusal of the catalogue, three products are mentioned: "Apocactin," "a combination of drugs you don't often encounter" which is stated to contain Hawthorn, Cactus, Apocynum, Avena Sativa and Collinsonia. Fibrinogen, a blood coagulant which has not been admitted to New and Nonofficial Remedies. Pasconia, "a sedative and stabilizer in the erratic action of the 'nervous heart,'" which is stated to contain Passiflora Incarnata, Avena Sativa, and Collinsonia. The drugs that make up "Apocactin" and "Pasconia" are not to be found, either in Useful Drugs or in the United States Pharmacopeia. Some are not even included in the National Formulary, which aims to include preparations of drugs which are supposed to have any usefulness at all. All belong to that larger and ever growing collection of drugs that have been discarded because they were found to be inert or inferior to other drugs having the same action. The following is the estimate of the Council on Pharmacy and Chemistry as given in the Epitome of the U. S. Pharmacopeia and National Formulary for those drug constituents of "Apocactin" and "Pasconia" which are included in the National Formulary: Passiflora (passion flower) "Exploited by manufacturers of proprietary medicines for the treatment of insomnia, but probably inert." Avena Sativa (oat) "A constituent of certain nostrums; has no place in the materia medica." Apocynum (Canadian hemp) "Cardiac tonic of digitalis group, unreliable as to rate of absorption." (*Jour. A. M. A.*, July 2, 1927, p. 50).

**PLASMOCHIN.**—The Council on Pharmacy and Chemistry issues a preliminary report on "Plasmochin," a synthetic quinoline derivative, developed in Germany and proposed for use in the treatment of malaria. For many years attempts have been made to find a substitute for quinine that would be cheaper, less bitter, less toxic and more specific than quinine. Plasmochin appears to be a step forward in this search, though it is not a full solution of the problem of eradicating malaria. It is said to act by destroying some of the forms of the malarial parasite and by inhibiting the development of others. Those who have studied the drug appear to agree that the new drug is most effective on the quartan forms of malarial parasite, that in tertian malaria a combination of the new drug with quinine is more effective, and that in birds the drug is sixty times more effective than quinine. The Council points out that results derived from the study of bird malaria have chiefly a suggestive value, and that further clinical study must be made before any optimistic estimate of its value in human beings can be formed. The Winthrop Chemical Co. has imported the drug for clinical trial and this is labelled to be "ethylaminoquinoline tannate." The firm states that the product when placed on the market in this country will be manufactured here. The Council has postponed further consideration of Plasmochin until clinical evidence concerning the efficacy, safety, and dosage of the product is available. (*Jour. A. M. A.*, July 9, 1927, p. 113).

**LIMITATIONS OF GOITER PROPHYLAXIS.**—Government authorities believe that there is no reason for special goiter prevention measures on the part of the state and local health departments. They do not see any necessity for universal prophylaxis such as may be attained by iodization of table salt or municipal water supplies. There is a growing opinion that the administration of iodine as a means of preventing goiter should be under the guidance of physicians and should be individualistic. In this way much good may be accomplished. (*Jour. A. M. A.*, July 9, 1927, p. 114).

**VACCINATION OF THE NEW-BORN AGAINST TUBERCULOSIS WITH BACILLUS CALMETTE GUERIN.**—The history of the vaccination of new-born infants against tuberculosis with Bacillus Calmette Guerin (abbreviated B C G) since July 1, 1924, in France and other countries over a period of two and one-half years to January 1, 1927, has just been reviewed by Professor Calmette with his co-workers Guerin, Negre and A. Boquet at the Pasteur



Institute in Paris. The vaccine is a living tubercle bacillus of bovine origin rendered avirulent for all animals by 230 passages on bovine bile medium. For the preparation of the vaccine, the B C G organism is transferred from the bile medium to a synthetic medium, cultured, and an emulsion of bacilli prepared. 2 cc. of the finished preparation constitutes a dose to be fed to an infant in milk. Three doses are given. A total of 43,283 children have been thus vaccinated. The various papers which are reviewed may be said to represent the culmination of the life work of a revered scientist. They may open a new era in the eradication of tuberculosis and in the knowledge of its epidemiology. For the United States, however, and for all countries it would seem wise to hold in check uncontrolled enthusiasm for its use until those charged with the responsibility of safeguarding the public have carefully proved that the method and the premises are sound. (*Jour. A. M. A.*, July 9, 1927, p. 115).

**CACTINA PILLETS AGAIN.**—Twenty years ago preparations of *Cactus grandiflorus*—the Mexican night-blooming cereus—had considerable vogue, chiefly because of the extravagant advertising claims made for two preparations said to be derived from it—"Cactin" and "Cactina." In 1908, Sollmann thus ironically described the claims made for these preparations: "Should the heart be too slow, cactus quickens it; if the heart is too fast, cactus slows it; should the heart be too weak, cactus strengthens it; if the heart is too strong, cactus weakens it; does the heart wobble, cactus steadies it; if the heart is normal, cactus does not meddle with it." Subsequently a number of reports were published showing pharmacologically and clinically that preparations of cactus were inert. As a result of the thorough exposure of the worthlessness of cactus preparations, proprietary houses have generally abandoned their exploitation. While "Cactin" (now called "Cactoid") is still offered for sale and is still the "joker" in a proprietary morphine-scopolamine preparation, no claims for it are advanced. In the case of "Cactina Pillels," however, the proprietor—the Sultan Drug Co.—still finds it profitable to continue advertising in a certain class of so-called medical journals and to continue making the claims that have been so thoroughly disproved. To those who give credence to these advertising claims, a recent clinical study will be of interest: it reaches the conclusion that Cactina Pillels are no more than a placebo, thus agreeing with Sollmann, who twenty years ago called the preparation a psychic cardiac tonic. (*Jour. A. M. A.*, July 9, 1927, p. 138).

**TWO OBESITY FAKES DODGE FRAUD ORDERS.**—The Post Office Department called on the Hall Chemical Company, which sells the obesity preparation, Hall's Tablets Triturates—to show cause why a fraud order should not be issued against it. The proprietor of the company submitted an affidavit declaring that the sale through the mails of Hall's Tablets Triturates had been abandoned. Similarly the firm which exploits "Slends," a chewing gum coated with a mixture containing sugar and phenolphthalein, when asked why a fraud order should not be issued for selling Slends through the mails submitted an affidavit declaring that the business of selling Slends through the mails had been discontinued. There is, of course, nothing in the action of either firm to prevent the sale of the products in question through the drug stores. (*Jour. A. M. A.*, July 9, 1927, p. 138).

**BISMARSEN.**—The Council on Pharmacy and Chemistry publishes a preliminary report on Bismarsen, the name given by the Abbott Laboratories to a new derivative of arsphenamine containing bismuth and proposed for use intramuscularly in the treatment of syphilis. Bismarsen is the sodium salt of a bismuth derivative of arsphenamine methylene sulphonie acid, the exact structural formula of which has not been established. The Council reviews a report of clinical trials made by Drs. Stokes and Chambers and of a study made for the Council. The Council finds that the available evidence is insufficient to

permit the acceptance of the drug for New and Non-official Remedies; however, the generally favorable character of the reports together with the fact that Bismarsen is a chemical substance of controlled composition is sufficient to warrant its further trial by physicians with due recognition of the fact that the drug is still in the experimental stage. For the information of those who desire to use this compound, the Council publishes a description of the chemical properties, the actions, uses and dosage of the drug. (*Jour. A. M. A.*, July 16, 1927, p. 204).

**RADITHOR.**—This is one of the numerous pieces of quackery in the field of radioactivity. It is exploited by the Bailey Radium Laboratories of East Orange, N. J., the moving spirit of which is one William J. A. Bailey. The Radithor quackery consists of thirty half-ounce bottles of distilled water which is alleged to be radioactive. No less than thirty bottles can be purchased; and the price is \$30. That is, the price to the sucker who happens to be a layman is \$30; to the easy mark who can write M. D. after his name, it is \$25. An order form " . . . for Doctors' Use Only" states that "when patient buy direct, we allow doctors a \$5 credit on all orders." The physician who would order Radithor must be weak not only in medicine but also in morals. (*Jour. A. M. A.*, July 16, 1927, p. 208).

**"VISCOS" FOR VARICOSE VEINS.**—The Viscose Company, Los Angeles, California, sells a small amount of a glue mixture with a few rolls of gauze bandages for \$30. This combination is sold as a means of reducing varicose veins. Apparently, the Viscose Company also gives medical treatment to those who will come to its headquarters. The treatment consists of the mixture of "Viscose" which is melted, applied to the leg and covered with gauze; more "Viscose" and gauze are applied and finally all covered with a paper bandage. An analysis of "Viscose" in the A. M. A. Chemical Laboratory showed it to be essentially a mixture of zinc oxide and glycerin in a gelatine base. The Laboratory pointed out that the name is misleading, as viscose is a well recognized chemical substance. (*Jour. A. M. A.*, July 16, 1927, p. 225).

**THE JOY BEANS LABORATORIES FRAUD.**—One Frank Beland of Cairo, Illinois, exploited an indecent piece of quackery under such trade names as "Joy Beans Laboratories" and "Beland Laboratories," selling a preparation called "Joy Beans" as a sexual tonic. Beland had no medical or professional training; his nostrum was put up for him by Eli Lilly and Company, Indianapolis. Beland's exploitation of this aphrodisiac was found fraudulent by the post office authorities and was barred from the use of the mails. (*Jour. A. M. A.*, July 16, 1927, p. 225).

**PANCREOLS.**—In the advertising of the Drug Products Co., Inc., Pancreols (formerly called Insulols) are claimed to be rectal suppositories "Containing Specially Prepared Desiccated Pancreatic Hormone-bearing Substance Containing the Active Principle of the Islands of Langerhans." In effect this preparation offers insulin for rectal administration. Scientific evidence has not been offered for the value of this product. The rectal administration of insulin has been found of little or no value, as compared to the subcutaneous route, against glycemia, glycosuria or acidosis. The rectal administration of insulin belongs to the class of methods which are "either mechanically difficult, inconclusive, inconstant, or wasteful of the drug." No preparation of the Drug Products Co., Inc., has been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies. A number of this firm's products have been reported on unfavorably, namely, Pulvoids Calcylates, Pulvoids Calcylates Compound, and Pulvoids Natrium Compound. (*Jour. A. M. A.*, July 16, 1927, p. 229).

**KOCH CANCER FOUNDATION.**—On September 22 and 23, according to an announcement just issued, the second annual convention of the Koch Cancer Foundation will take place in Chicago, one of the meetings being a joint session with the American Association for Medico-Physical Research. The American Association for



Medico-Physical Research was organized in 1911 by the outstanding quack of the century, Albert Abrams. It is stated that some three hundred physicians will gather to discuss the use of Koch remedy in cancer. But one meeting is to be a joint meeting with the distinguished members of the American Association for Medico-Physical Research. The Koch representatives should add tone to this remarkable assemblage. (*Jour. A. M. A.*, July 23, 1927, p. 296).

**MORE MISBRANDED NOSTRUMS.**—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: Vitona (Vitona Mineral Ore Co.), consisting of a crude silicate ore containing iron sulphate, free sulphur and charcoal, with traces of calcium, magnesium and aluminum sulphate. McMichael's Allgland with Radium (Carnotite Gland Extract Company), tablets containing 91 per cent of milk sugar, together with talc, a trace of nitrogenous organic matter and a faint trace of radium. Allfood with Radium (Allfood Laboratories), consisting of about 86 per cent milk sugar and 14 per cent of material insoluble in water, comprising mainly talc, mineral water, and a small amount of animal glandular tissue. Each tablet contained about 0.09 milligram of radium. Brooten's Kelp Ore and Brooten's Kelp Ore Liquid (Kep Ore Remedies Corporation). The first was found to be a shale-like clay containing iron and aluminum sulphates, and a trace of sulphur, while the "Liquid" was a water solution of iron and aluminum sulphates, with traces of calcium, magnesium and potassium salts. (*Jour. A. M. A.*, July 23, 1927, p. 310).

**CULTURES OF LACTIC ACID PRODUCING ORGANISMS.**—Pseudo scientific promotion of lactic acid producing bacteria has become familiar, and in some instances it approaches outspoken quackery. The Council on Pharmacy and Chemistry of the American Medical Association has attempted from time to time to issue conservative, tolerant statements regarding the status of the uncertain lactic acid bacillus therapy. Furthermore, it has endeavored to establish the conditions under which alone, if at all, actual implantation effects can be expected. Thus, acidophilus milk and broth cultures and concentrates of *B. acidophilus* are not considered acceptable unless the number of viable organisms contained in a stated quantity is clearly stated, and the broth cultures and concentrates are made to indicate the need of the coincident administration of carbohydrates. The wisdom of the Council's cautions is indicated by the recent investigations of James in the microbiologic laboratory of the Bureau of Chemistry, U. S. Department of Agriculture. This survey of a number of marketed preparations indicated that samples representing cultures of both *B. acidophilus* and *B. bulgaricus* are not infrequently worthless. As was anticipated, the milks showed the highest average counts, the whey cultures next to the highest, and the solid cultures the lowest. (*Jour. A. M. A.*, July 30, 1927, p. 374).

**FOODS IN DIABETES.**—A generation ago the chief concern in the management of diabetes was centered in the reduction of the carbohydrate intake; consequently, in the choice of articles of diet preference was given to those relatively poor in sugars and starches. The expression "diabetic food" came into vogue to designate a variety of products, having in common a content of carbohydrate notably below that of ordinary products of the same class. An official definition was formulated by governmental authority, permitting the application of the term diabetic to indicate that a food contains "not more than half as much glycogenic carbohydrates as the normal food of the same class." The outlook on the dietotherapy of diabetes has been considerably altered in more recent years. It is no longer merely the carbohydrate in the food that merits attention. Sugar can be formed from

protein. Regulatory officials have become inclined to discourage the use of the term diabetic as a part of the name of these special foods. Accordingly there is no longer any federal definition of a diabetic food. Since such products are offered as dietetic acids in the control or mitigation of disease, they are regarded by food control officials as therapeutic agents rather than as foods and more properly regulated under the provisions of the Food and Drugs Act which refer to drugs. E. M. Bailey, the chemist of the Connecticut Agricultural Experiment Station, has also abandoned the term "diabetic food." In his latest report he remarks that successful diets for patients with diabetes may be formulated by proper selection of common foods quite as well as by the use of special foods. He states that many of the latter serve useful purposes but are expensive. The utilization of common foods is of increasing interest to the physician and to the patient. (*Jour. A. M. A.*, July 30, 1927, p. 376).

**MORE MISBRANDED NOSTRUMS.**—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: Sexvitor (Joseph A. Piuma), tablets consisting essentially of strychnine, a rhoschorus compound, a laxative plant drug extract and some animal matter. Rider's Eucalyptus Oil Compound (Dr. G. H. Rider Company), essentially petroleum oil flavored with sassafras. Moore's Liver-Ax (The Mount Grove Grocery Company), an extract of laxative plant drugs in a mixture of water and alcohol. Genitol (Brewer and Company, Inc.), containing 18 per cent alcohol, about 2 per cent mineral matter, sugar and glycerin. Nervo-Vital (Brewer and Company, Inc.), consisting of alcohol, glycerin, sugar, mineral matter, and a small amount of strychnine and nitrogenous matter, together with some water. (*Jour. A. M. A.*, July 30, 1927, p. 390).

**COLLOIDAL KAOLIN IN INTESTINAL TOXEMIA.**—Suspensions of colloidal kaolin are of little or no use in the treatment of intestinal toxemias. Colloidal kaolin chiefly absorbs basic substances from acid mediums. Alkaline fluid liberates the basic substances from its absorption in the alkaline intestine could hardly be expected. In practice, colloidal kaolin has been disappointing. (*Jour. A. M. A.*, July 30, 1927, p. 393).

## BOOK REVIEWS

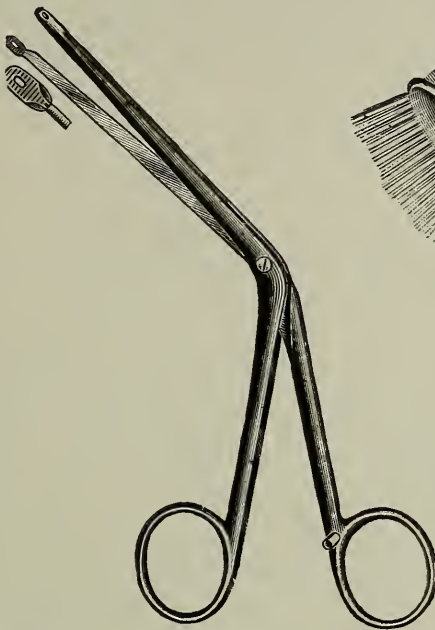
**PHYSICAL DIAGNOSIS.** By Richard C. Cabot, M. D., Professor of Medicine in Harvard University; formerly chief of the West Medical Service at the Massachusetts General Hospital. Ninth edition, revised and enlarged, with six plates and 279 figures in the text. Cloth. Price \$5.00. William Wood and Company, New York, 1927.

This well known and popular book by a well recognized authority requires no extensive review. It presents an account of the diagnostic methods and the processes needed by competent practitioners of medicine. In reality, it deals only with tests that are useful, and the author very wisely leaves out the things that he considers unimportant. Clinical and laboratory diagnosis are not considered in separate sections but are united, as they should be, when considering an organ. In the present or ninth edition the chapters on cardiovascular disease represent a good many changes. Reference also is made to the phonographic records illustrating all the various normal and abnormal sounds of the heart. The sections on tuberculosis and the blood also have been revised.

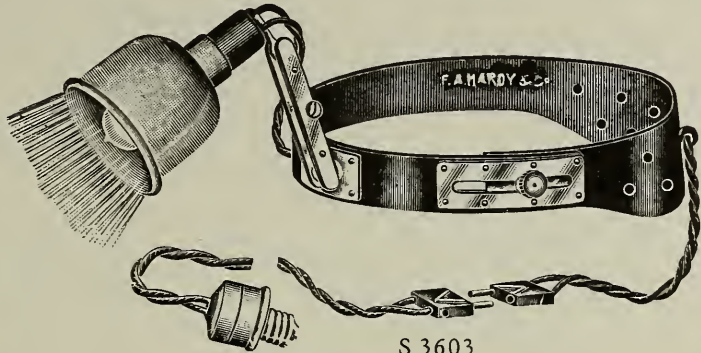
**PRACTICAL OTOTOLOGY,** by Morris Levine, M. D., Associate Professor of Otology, New York Post-graduate Medical School and Hospital; Associate attending Otologist, New York Postgraduate Medical School and Hospital. Illustrated with 145 engravings and three colored plates. Cloth. Price \$5.50. Lee & Febiger, Philadelphia, 1927.

(Continued on Adv. Page xx)

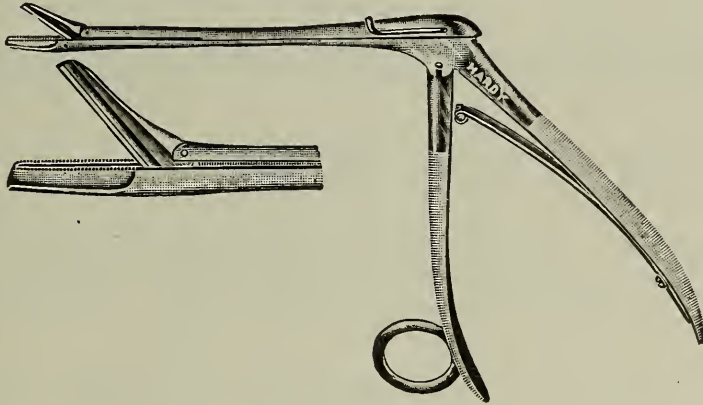
# A FEW EXCEPTIONAL VALUES FOR THIS MONTH ONLY



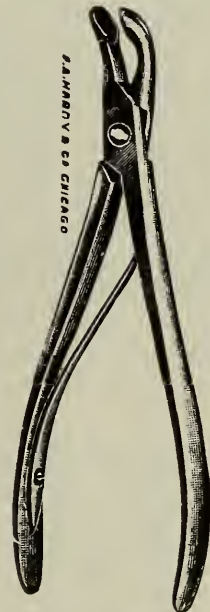
S 1623



S 3603



S 1669



S 1403

S 3603	Murphy Headlight with Mazda Lamp.....	\$6.50
S 1623	Valle-Heaths Nasal Dressing Forcep.....	2.50
S 1403	Bane's Mastoid Bone Rongeur Stille.....	7.50
S 1669	Struycens Nasal Cutting Punch Forcep Stille.....	7.50

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CHICAGO

122 East Washington Street  
FORT WAYNE



# BOOK REVIEWS

(Continued from Page 376)

The author says that this book essentially represents a compilation of lectures on otology given at the New York Post-Graduate Medical School and Hospital, yet as a matter of fact the subject matter has been so arranged and the discussion is so clear and comprehensive that the book becomes a textbook of high grade. It is adapted not only to the use of post-graduate students but will be found useful to general practitioners, and an excellent reference work for the specialist. Both diagnosis and treatment have been emphasized and in a manner that makes the book eminently practical. The illustrations are excellent. A noteworthy feature is that the author does not lose sight of the fact that oftentimes the general conditions must be given consideration in addition to the use of local measures of treatment. There are many larger and far more comprehensive works on otology but there are none that are better as a practical and concise treatise that will be found exceedingly useful to every busy practitioner who is called upon to diagnose and treat abnormal conditions of the ear.

A TEXTBOOK OF PATHOLOGY, by Alfred Stengel, M. D., Sc. D. Professor of Medicine at the University of Pennsylvania; physician to the University Hospital, and Herbert Fox, M. D., Professor of Comparative Pathology, and Director of the Pepper Laboratory of Clinical Medicine, University of Pennsylvania; Pathologist to the Philadelphia Zoological Garden, Eighth Edition, reset, with 1138 pages, and 552 text illustrations, many in colors, and 18 colored plates. Cloth, \$10.00 net. Philadelphia and London. W. B. Saunders Company, 1927.

The popularity of this book as a standard work on all the essentials of pathology, both for students and practitioners, is shown by the fact that it is now in its eighth edition. Extensive changes have been made in illustra-

tions and text to bring the subject up to date. Part one devotes 448 pages to General Pathology and adequately covers the etiology of disease, and the pathologic processes. Part two is composed of seventeen chapters, each of which takes up the diseases common to a special system or organs, the descriptions of which are clear and concise and comprehensive. The work is beautifully and profusely illustrated. For this reason it is especially suitable for students. The print is large and easy to read and the references are given at the bottom of the page. The chapters on immunology, hematology, bacteriology and parasitology are comprehensive and especially well written. Diseases of the Gastro-Intestinal tract are given considerable space. The volume is well indexed.

## LIST OF EXHIBITORS

(Continued from Page 358)

Knox Gelatine Co., Chas., Johnstown, N. Y.  
Laboratory Products Co., Cleveland, Ohio  
Mead, Johnson & Co., Evansville, Ind.  
Medical Protective Co., The, Chicago, Ill.  
Mellin's Food, Boston, Mass.  
Mountain Valley Water Co., Hot Springs, Ark.  
V. Mueller & Co., Chicago, Ill.  
Ohio Chemical and Mfg. Co., Cleveland, Ohio.  
Patch Co., The E. L., Boston, Mass.  
Physicians Supply & Drug Co., Chicago, Ill.  
Pitman-Moore Co., Indianapolis, Ind.  
Sanborn Co., Cambridge, Mass.  
Sharp & Smith, Chicago, Ill.  
Squibb & Son, E. R., New York City.  
Swan-Myers Co., Indianapolis, Ind.  
Victor X-Ray Corporation, Chicago, Ill.  
Wayne Pharmacal Co., Fort Wayne, Ind.  
White-Haines Optical Company, Columbus, Ohio.  
Woche & Son Company, Max, Cincinnati, Ohio.  
Zimmer Manufacturing Co., Warsaw, Ind.  
Zimmerman X-Ray Supply Co., Fort Wayne, Ind.

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INDIANAPOLIS

# THE JOURNAL

OF THE

## INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

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#### PRESIDENT'S ADDRESS\*

THE INDIANA STATE MEDICAL ASSOCIATION

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INDIANAPOLIS

Mr. Chairman, Ladies and Gentlemen:

I wish to express my very great appreciation for the honor of being your president during the year 1927. The presidency carries responsibilities of which I have not been unmindful, which at many times I have been made to feel very keenly. Some of these responsibilities have been pleasing, while others have been anything but so. Be that as it may, they have been met with but one view, namely, the welfare of the profession as represented by this Association.

The presidency affords a rare opportunity for one to become acquainted with all of the activities of the profession in the State, and as a result it is to be expected that one will reach some conclusions which should be presented. It probably is for this reason that the president is mandated by the constitution to deliver an address at the annual meeting. The Association claims a very large percentage of the profession of the state within its fold. A careful canvass of the situation reveals only a scattered few who should be members and who are not in. Some component societies number one hundred percent, while in others there is a number without the organization which is larger than should reasonably be expected. Where this condition exists it usually can be traced to an indifference on the part of the local officers which I may say seems to be a sin of omission rather than commission.

The office of the Association houses our very efficient secretary, Mr. Hendricks, and his two able assistants, Mrs. Gillespie and Miss Cashman, and is a veritable beehive of activities, ever busy, always ready to extend every energy in behalf of the medical profession of the State.

The wisdom of the change in the management of the business affairs of the Association has been proven many times and this in no way reflects on the conscientious and able services which have

been rendered the profession by its servants in the past. THE JOURNAL, ably edited and published by Dr. A. E. Bulson, Jr., is rendering a more valuable service than ever before. Dr. Bulson, by establishing a closer relationship with the Indiana University School of Medicine and the Indiana State Board of Health, has brought about a better understanding between these two agencies and the medical profession, which cannot but redound to the public good. The Bureau of Publicity is never ceasing in its endeavor to convey to the public the truth concerning medical knowledge. The councilors, presidents and secretaries are entitled to much credit for the energy displayed in promoting and providing for the district meetings and the county presidents and secretaries are entitled to equal praise for the healthy militant situation in which the profession finds itself at this time. I would be remiss did I not call attention to the unselfish, efficient and conscientious labors which have been performed by all of the state officers, and to these, individually and collectively, I want to express my sincere appreciation.

The medical profession at large, more than any other body, has felt the embarrassment which has come from the dissension arising in the State Board of Health. The officers of this Association have made no small effort to smooth out these dissensions until I feel that we are to congratulate the people that apparent peace has been established and we confidently look forward to real constructive work in the future.

It should be remembered at all times that the medical profession is the one body that has dedicated its life to a study of the science and devoted itself to a practice of the art of healing, and represents the one agency to which the State should go for aid and guidance in all of its health activities. The policies of the State Board of Health should represent the consensus of opinion of the medical profession. Its members should be made up of men with broad professional perspective, and one of the first duties of this organization is to use its influence to the end that these things are done.

The law under which the State Board of Health operates should be supplanted with a new one

\*Presidential address delivered before the Indianapolis session of the Indiana State Medical Association, September, 1927.



and the medical profession should be consulted more than any other agency in drafting it. The Health Department has a distinct field of activities in preventive medicine and public health education. It also has a distinct obligation in providing facilities whereby the poor may receive adequate medical and surgical treatment, but medical practice is for the medical profession. And it may truthfully be said that it has never neglected its obligation in this respect. One engages in medical practice primarily for the purpose of rendering service, and while it is true that the physician must live and support his family, finance must remain a secondary consideration. He who engages in medical practice for the purpose of making money had better stay out. He will always be a liability to his profession and never an asset. Tradition and the professional obligation commit the medical profession to everything that the Health Department should do. However, some members of the profession are largely responsible for some of the unsatisfactory situations which prevail at the present time in connection with the Health Department.

Eighty-two counties in the State are now suffering from rabies. This represents about all of them. Some of them have many cases. The law provides means for the treatment of those who are too poor to meet the expense. It provides that the township trustee and a local physician shall certify under oath that the person is a dependent, after which it becomes the duty of the State Board of Health to provide the treatment. Unquestionably some physicians have made such certifications which cannot be borne out by the facts. This is to be deplored and represents a low moral courage or an effort to cover up professional ignorance, either of which is bad enough. The treatment is simple and the expense of it should be borne by the individual when possible and the treatment conducted by the family physician in every case. The State should provide the medicine only in cases of dependents and the profession should administer it in every case. Let us hope that following the demonstration made here today every physician will meet his obligation and that the State Board of Health will cooperate fully in the matter.

Another regrettable practice is to be found in the venereal disease situation. This is the hang-over of a war measure inaugurated to increase the man power of the nation. The State Board of Health is engaging in medical practice for a fee and treating many who are in no way subjects for charity. This is nothing more nor less than State medicine and represents a practice that should be discontinued at once. I feel that our By-Laws should be amended so that the State Board of Health may be represented in our House of Delegates, and thereby bring about a closer relationship to the end that the profession and the Health Department may progress hand in hand

in the performance of their duty.

Last year a special committee was appointed to investigate the question of post-graduate study and its report will receive action by the House of Delegates at this session. There is every reason for post-graduate study if the profession is to keep abreast of the progress of the time. There is likewise every reason for the study being brought to the physician that he may remain in a position to care for his clientele and support his family. Probably no one is so able to judge the needs of the profession as the profession itself. To this end, smaller county societies may well form themselves into larger groups, such as tri-county organizations, for this purpose. Especially is this true as a result of the automobiles and good roads of today. When these groups have been formed a suitable committee (perhaps the council) could study, canvass and acquaint itself with the situation, then arrange for a splendid post-graduate course to accommodate those concerned. In larger centers this can be provided wholly within the society.

The service rendered the public by the Indianapolis *News* in its recent expose of the diploma mills frauds cannot be too highly commended. While many had much reason to believe that some of the cult schools were the worst kind of fakes, it remained for the *News* to investigate, discover and expose what was going on in our very midst. Much credit is due to the clever and able work of Walter Shead of the Indianapolis *News* in protecting the public from these would-be doctors.

A canvass of Indiana reveals that whereas there are three hundred and fifty more members of the Indiana State Medical Association than there were two years ago, there is a loss of about one hundred in the total number of physicians in the State. The population is increasing, but the figures show that the physicians are decreasing. In my opinion any community which supports a high school and a bank would support a physician, yet there are any number of such communities which do not have a physician. The office of the executive secretary has on file some twenty-five applications from these communities seeking a resident physician. I have made some inquiry from reliable medical men engaged in rural work and I am convinced that the consensus of opinion is that there is a need for more physicians. I have the feeling that there should be an ample supply and am unable to conceive of any other viewpoint that could rest on a sound professional basis. It is the duty of our educational institutions to fully supply the public with qualified physicians.

We are confronted with the question as to whether medical teaching is not too highly specialized, serving to discourage many who might enter the study and return to render a valuable public service. I have the feeling that academicians have dominated the medical teaching field entirely too much, and that some changes should

be made which would meet the situation in a more practical way. The growing tendency to specialization without the opportunity to attain professional perspective, which can only come by experience, is to be deplored. Our present methods seem to be fostering a dangerous professional mortality, from which the professional as well as the public may suffer. The specialist cannot be too highly trained for he owes to the public in addition to being a well-rounded-up medical man, as good as the world knows in his specialty, whereas the obligation of the man engaged in general work owes the public only the average in skill and knowledge possessed by his professional confreres.

It will be observed that the purposes of this Association are fully commensurate with the high ideals with which tradition surrounds our profession. This Association is mandated by its constitution to promote the enactment and enforcement of just medical laws, to guard and foster the material interests of its members and to protect them against imposition "that the profession may become more useful to the public in the prevention and cure of disease and prolonging and adding comfort to life."

Paragraph 2 of the Oath of Hippocrates, which oath many have taken and to which all subscribe, says, "I will follow that method of treatment which according to my knowledge and ability I deem best for my patient, and abstain from all things which are injurious and mischievous." Due to those who would yield principle to political expediency, the medical profession of Indiana finds itself in an embarrassing situation as regards the prohibition law of the state. It is a dangerous situation when a lay body will enact laws which say that a physician shall not employ any remedy when, according to his ability and judgment, he considers it best for his patient. The law-making body may as well say that the physician may not employ ether as an anesthetic or morphine as a narcotic as to say that he may not employ whiskey or champagne when his judgment dictates its use. It is not sufficient to say that much distress and havoc have been wrought by spirituous liquors. To take such a position is wholly beside the question, for the fact remains that the physician who would object to stringent regulation would be in as ridiculous a position as the legislator who would say, "You shall not do so."

The medical profession has aided and abetted the government in the regulation of narcotics and may be depended upon to aid and abet the regulation of spirituous liquors, but must resent the mandate that "you shall not" as being unjust, unnecessary, and contrary to public policy, a violation of a basic principle and a direct insult to our honored profession. Let the regulation be as stringent as the most enthusiastic would demand, but leave the honored medical profession free to

employ every agency at its command in performance of its great public obligation.

There are other medical laws which are of vital concern to our profession. I have in mind the regulation of medical practice in the state. The first great purpose of this law is to protect the public against the incompetent or fraudulent individuals who would exploit it. To this end the state has set up machinery whereby it can determine the fitness of any person seeking the privilege of treating the sick. Every conceivable effort has been made in the past to avoid the provisions of this law, and it has in every case been successful insofar as the unqualified have been concerned, and in reality has operated only to regulate those who have conscientiously conformed to its provisions. The last General Assembly amended the regulatory act whereby all are made equally amenable to its provisions, and Indiana now has a regulatory act which regulates. It is true that practically all legislation is the result of a compromise, and the present law provides for licensing all who have made any conscientious pretense to qualify. In the future, all persons who would engage in the solemn occupation of treating the sick must first satisfy the state that they are qualified in their knowledge of the human body and the diseases which affect it, and that is well.

#### MEDICAL PRACTICE AND MEDICAL PROGRESS\*

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The growth of medical knowledge from the earliest times to the present might well be traced on a curve which begins slowly, holds for centuries a close relationship to the base line, and at its terminus makes an upward ascent like the swift and tumultuous drive of a sky-rocket. Beginning with the ancient Egyptians, the Greeks, the Hebrews and other civilized peoples at least five centuries ago, men began to add actual observations to the superstitions and beliefs of their time. The conjuring tricks of the priest healers gave way to the careful records of the graduates of the school of Hippocrates. That masterly description of the patient about to die, known as the Hippocratic Facies, has come down to modern times essentially unchanged by the added studies of modern observers. The middle ages, that dark period when man gave more concern to his soul than to his body, not realizing that a healthful soul seldom arises or develops in a sickly body, added but little to the progress of medicine. A Servetus was burned for attempting to contribute to the knowledge of human anatomy. A Vesalius was forced to do penance in a trip to the Holy Land for dissecting a human body. Only the masterly genius of a Leonardo da Vinci was able

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to add successfully to the accumulation of facts. Indeed, even he recorded his observations in a queer sort of mirror writing, evidently with the hope of concealing them from the babbity of that day, which looked with suspicion on any unusual demonstration of curiosity or intelligence.

With the beginning of the seventeenth and eighteenth centuries came the knowledge of the circulation of the blood, of definite action of certain drugs, and of other subjects in the field of physiology and of anatomy; but still man sought to overcome the plague by the burning of incense or by plowing ten times around the devastated villages. The beginnings of medicine in America were but a reflection of the knowledge of England, of France, and of Holland. True, Benjamin Franklin was able to contribute his sound reasoning to the field of healing; true, Benjamin Rush and others wrote sound defenses of inoculation against smallpox and sought to apply, perhaps on a community scale, the pitifully small knowledge of preventive medicine that was then available. However, it was not until the time of Pasteur, with his magnificent contribution to the science of bacteriology, that a real science of preventive medicine arose. When man once became conversant with a knowledge of the way in which diseases could be passed from one human being to another and with the actual causes of disease, prevention became practical on a community scale.

As a result of this knowledge, life expectancy has increased so that the death rate has been lowered from 31 per thousand in 1824 to 12 per thousand in 1925, and so that the average life has increased from 36 years in 1880 to 53 years in 1920. This increase in life expectancy has meant more for humanity than all of the battles ever waged and for which monuments were erected to the conquerors. It has meant more for human happiness than has any other contribution of civilized man; it has freed man from the fear of disease.

The great success of preventive medicine has involved application on a community scale of the knowledge of disease developed by individuals. Typhoid fever has been practically eliminated from every community. If the case rate for typhoid fever that prevailed in Chicago in 1880 existed today, there would have been 60,000 cases of typhoid fever in Chicago last year instead of the 164 that actually occurred. In the old days many a physician sent his sons through college on his income from typhoid fever. Smallpox has been virtually eliminated by the use of vaccination, isolation and quarantine. The death rate for tuberculosis has been cut more than one-half by the knowledge of preventive medicine applied to that disease. The infant mortality rate, representing the pitiful deaths of babies within the first year of life, has been lowered to less than one-half of what it previously was, by the application of knowledge regarding infant feeding,

and by the control of infections concerned in infant mortality. Here is knowledge applied on a community scale by public health officials, with the cooperation of the public and of the medical practitioners necessary for the administration of preventive methods applied to the individual. Such cooperation can virtually abolish most of the severe infectious and contagious diseases from any community. But bear in mind that the giving of serums and vaccines and antitoxins and skin tests and all of the other methods in the increased armamentarium of preventive medicine represent procedures applied to one individual by another. These are not the same type of procedures that are necessary for the provision of a sanitary supply of water, for the disposal of sewage, for the control of milk and food, for the elimination of contacts with those infected in places of public assembly. Nevertheless, it has been the plea of some of those who would be forward looking in matters of public health, that the methods of the public health official, having been successful in sanitation, will be equally successful in the prevention of all disease in the individual and even in the treatment of disease.

Investigations have shown that further increase in life expectancy depends largely on the control of such conditions as heart disease, high blood pressure, Bright's disease and other diseases of the kidney, brain hemorrhage, and cancer, conditions which have not been shown to be infectious, and which are grouped as degenerative diseases. They represent the type of disorder that results largely from the wearing out of the human tissues, and that occurs chiefly beyond middle age, at the time when the individual cells no longer have the power of repair. The hope of preventing death from these diseases rests in their early detection and in the application of sound personal hygiene. Methods of living must be established that will put on the defective organs only such burdens as they are capable of bearing. Since early detection is important, physicians have suggested that everyone, and particularly those beyond middle age, arrange to have an examination made at least once each year. This process is known as periodic physical examination, and is already being applied on a large scale in various ways in many communities. The attempts to introduce this method for the benefit of man have brought into the practice of medicine more intensely than ever before questions of commercialization of medical practice, of socialization and of paternalism. They have made a vital issue of what was formerly, to a large extent, a dream in the minds of socialists and of sociologists, of welfare workers and of idealists.

The family physician of an earlier period when called to see a patient suffering with disease subjected him to a relatively simple examination. This involved primarily the recording of all of his previous illnesses and perhaps those of his parents

and ancestors; a somewhat detailed inquiry into his habits of life, with brief emphasis on diet, rest, exercise, hours of work and hours of sleep; an investigation of his recent travels or departures from the community, and of his possible associations with cases of contagious disease. Following this inquiry, the physician proceeded to a physical examination which involved an inspection of the tongue, the taking of the temperature, the pulse rate and respiration, an examination of the skin as to its texture, color, dryness, etc., and finally a careful study of the eyes and of the reflex actions of the nervous system. On the basis of this knowledge and with the carefully detailed story of the natural courses of various diseases somewhat definitely in mind, he was ready in most instances to make a diagnosis. He usually proceeded from this to an application of two types of physical diagnosis that had been well established by Auenbrugger and Laennec; namely, percussion and auscultation. After learning what was to be learned by thumping and listening and by palpation, he added these observations to his original knowledge and could in most instances make a diagnosis. Not infrequently he asked also for specimens of excretions, and he was able by rather cursory examinations to determine other factors which might be of service. Much of his time was spent in gossip about the family's relationship with one another and with the community, and he was able without much direct questioning to have a rather good insight into any mental disturbances or difficulties of personal relationships that might be basically related to the ailment from which the patient suffered.

It must be remembered that early in the nineteenth century the great German pathologists had begun to list and itemize carefully the physical conditions associated with disease as determined by postmortem examination, and there grew up the great Virchow school of pathology, with the conception that for every disease there must be some physical cause.

Gradually there developed also, in this country, particularly, the application of our modern knowledge of physics and of chemistry to medical science. The unaided five senses of man began to be supplemented by prolongation of these senses through mechanical devices. The microscope had already strengthened the power of vision, the stethoscope the power of hearing, but it remained for the electrocardiograph, polygraph, the electric stethoscope, the audiometer, the plethysmograph, the ultra microscope, the use of the dark field illuminator, the micrometer, the sphygmomanometer and many other devices to bring to medical science tests of disordered function which made the family physician in many instances merely a collector of specimens and of records.

The family physician of that day had been educated in a medical course requiring two years of eight months each in which the same lectures were

repeated year after year. When the basic sciences of chemistry, physiology, pathology, histology and neurology were added to medical studies educators began to realize that physicians really required a knowledge of all things. Thus the medical curriculum gradually became lengthened to the present course, which includes in most instances two years of university education after the high school, four years of medical education, including many hours spent in laboratories, a year of hospital internship, and possibly two or three years as assistant to a specialist by those who wish to specialize in some medical specialty.

Today an investigation of disease includes not only all of the procedures that were previously mentioned, but investigation of all of the body orifices and cavities by instruments especially designed for the purpose: the use of the ophthalmoscope to study the eye grounds; the use of the laryngeal mirror and even of the bronchoscope for the throat and the lungs; an electrically lighted ear speculum for the ears; the urethroscope, the cystoscope and proctoscope for other orifices; the use of inflations and gas injections and subsequent Roentgen ray studies of the abdominal cavity; the use of opaque substances, such as lipiodol for studying the outlines of internal organs; the use of bismuth for making opaque the gastro-intestinal tract; the use of phenoltetrachlorophthalein for outlining the gallbladder and its contents; the use of phenolsulphonephthalein and of half dozen other functional tests for determining the actual functional capacity of the kidneys; the use of minute measurements of the basal metabolism, of the heart rate, of the pulse rate, of the blood volume and of variations in the pulse beat and in the heart beat for determining the difficulties of the mechanism controlling this vital motor organ. The nervous system is studied with the aid of electric devices of which the names are unknown to many physicians. The brain is made visible by intricate injection procedures and Roentgen ray examinations. Specimens of blood and of the excretions of the body are submitted to laboratories which submit these to intricate manipulations that reveal brilliantly the chemical mysteries constantly being performed by the vital organs. To many a physician all of these data when assembled are merely a confusion which may well cause him to shake his head sadly and to wish for the days that used to be. But to the man who has kept abreast of medical science in all of its various fields, who has taken advantage of medical periodical literature and of graduate medical courses offered by medical schools of universities and of special lectures offered through county and state medical societies and of meetings of national medical associations, to such a physician all of these aids are most fascinating in their



helpfulness toward a diagnosis—the most interesting exercise in which the human mind may indulge. If he is familiar with the cause, the character of the disturbance physically, chemically and mentally, associated with the disease, he is able to set it as definitely into the category in which it belongs as is the man who puts the word "Thanatopsis" horizontally or vertically in a cross-word puzzle. The listing of the signs and symptoms in the correct order chronologically and in relation to their significance is the key that unlocks for him the riddle of the patient's ailments.

When he comes to treat disease he is again confronted with a choice from the midst of a vast armamentarium of medical measures. It is at this point that he again distinguishes his difference from the cultists who rely on a single system for the diagnosis and treatment of every disorder that afflicts mankind. He is able to select remedies provided by nature herself, such as water, light, heat, cold and electricity. He may administer inorganic chemicals that have been found in the laboratories of pharmacology to have definite effects on the human body, or remedies that represent extracts of plant or animal tissue with significant properties. Sometimes he resorts to biologic preparations that represent either extracts of bacteria themselves or substances derived from the blood of animals or of human beings created in that blood in order to make the injection of bacteria specific against various disorders.

If he has given any study at all to the workings of the human mind, to psychology, to psychopathology and to psychiatry, he is able to bring into the picture the power of suggestion, used by faith healers of one variety or another, but abused by them through its combination with the mumbo-jumbo or hocus-pocus of religious, spiritual or fanatical rigmarole. The manipulations of chiropractors or osteopaths, the jumping sparks of the electric faker, the incantations and readings of the Christian scientist, divine scientist, applied scientist, or Jewish scientist are merely the theatrical settings for unscientific suggestion. The physician familiar with the nature of the disorder from which the patient suffers selects any or all of these remedies to meet the conditions as he knows them to exist through his examination and study.

The process that has been described for the diagnosis and cure of disease and for its prevention also, because it is only as a result of such investigation that one is able to guide the human body in the prevention of disorders, represents a cross section of what is available to the scientific physician today. Unfortunately it is not equally available to all patients.

When a rich man becomes ill, he calls for a physician. Usually the physician goes to him, thereby using a considerable amount of time in traveling that might have been used in a hospital or in the physician's office for seeing a number

of patients. Specialists are brought to the bedside, but more likely, in these modern times, the patient is taken to a hospital. In that hospital the patient is likely to have the competent attention of laboratory investigators, of roentgenologists, of specialists in diseases of the various organs concerned and indeed, if necessary, of several men of the type of practice in which the attending physician himself indulges. Nurses, orderlies, secretaries and maids are at the patient's beck and call. For every one concerned there will be a fee collected by each of them individually or by the hospital. The fee is usually equivalent to the type of service rendered and the fact that the person concerned is a man of importance.

A person of the middle class similarly afflicted and able to perambulate on his own power is likely to go to the office of his family physician. The physician, if he is a good one, will make a complete physical examination and will record the history of the patient; he will make such laboratory tests at once as seem to be necessary; if x-ray pictures are required, he may have them made at an x-ray laboratory in the same or a nearby building. As a result of the evidence secured, he will make a diagnosis—if not a certain diagnosis, at least a tentative one. If the advice of a specialist is required, the physician may recommend to the patient that he go directly to the specialist, and he is likely to explain to the patient the additional cost involved. In most instances this diagnosis and the treatment given will be successful. In many instances it may be necessary to send the patient to a hospital, in which case most of the procedures that have been mentioned for the wealthy patient will be called into action. By our present system of hospital organization, the hospital costs for the person of the middle class will be essentially the same as for the wealthy.

The application of medical practice has been changed greatly by the development of the hospitals. The advantages lie in the ability of one especially competent physician to see many more patients in a single place where all the armamentarium of medical technique is assembled. But the disadvantages lie in a still greater depersonalization of the patient as he was seen at home. Hospitalization, too, continues to be a more and more costly process. The rich can afford it. Some of the poor are provided with it through the increasing burden of state aid and the accumulation of vast philanthropies. The middle class, existing in the kitchenette, must have the hospital when it falls ill, for even the obscenity of nocturnal employment of the quarters devoted primarily to eating, bridge and listening to the radio, cannot tolerate pneumonia, ozena, or rheumatism.

If the person concerned is poverty stricken or a person of less than average income he goes, perhaps, to an institution supported by public

funds, in which he becomes the charge of physicians engaged in teaching medicine and thus under constant trial by their peers. Under such circumstances naturally he loses his privacy. In the institution all of the methods available to the modern practice of medicine may be had without cost by the indigent patient, but he does not get the personal attention or nursing care that are paid for by the rich.

The person of any class, if he consults his family physician, is likely to have more than an even chance for good medical care without exploitation. The poor man, or the person of low middle class, is unfortunately the one most frequently exploited by all of those on the borderland of medical science. He it is who usually provides the primary source of revenue for chiropractors, osteopaths, electronic therapists or naturopaths; he it is who is likely to attempt to save the cost of a visit to a physician by purchasing a patent medicine widely advertised in the press or by asking his corner druggist for a prescription; he it is who is likely to belong to a fraternal order which maintains a lodge doctor. He is one who may be working in some large industrial plant or factory where a certain sum is taken from his wages each week to pay for the treatment in the factory hospital or for a visit from the factory doctor when he becomes sick. He is a man usually poorly educated regarding his own body. He falls victim easily to all of these medical wiles before he is turned by his indigence into community care, and he gives most concern to the workers of welfare.

This brief picture of medical practice and of medical progress in our day gives rise to two problems for solution: First, how is the progress of the day to be brought to the physician in general practice so that he may in turn apply it to the prevention and treatment of disease in his clientele? Second, how is the public, particularly the middle class, to obtain such service from the medical profession at a price that it can easily afford? Modern medical organization, as has already been stated, is endeavoring to develop methods that will make it easy for the practitioner to keep abreast of the progress of knowledge with annual sessions of great medical organizations and weekly meeting of county and city medical societies. Clinical congresses have of late come greatly into vogue. Here leaders in medicine are brought and demonstrate on living patients the procedures that they themselves use in the diagnosis of disease. Here also they outline methods of treatment for the care of these patients. It is a significant factor that persons used in such clinics are no longer invariably limited to the poor. The middle class and the rich have discovered that the patient in the public clinic receives a type of medical attention that may well be the envy of those who wish individual and special attention. The graduate instruction afforded by such sessions is amplified by special arrangements

made in many cities and counties, notably in Kings County, Brooklyn, in Buffalo, New York, in Connecticut, in Michigan, in Pennsylvania, in Wisconsin and other states, for graduate courses in medicine under special instructors. These courses are to be had on the payment of a small fee which hardly pays the cost of the teaching. Not infrequently the instructors devote themselves to this service for the good of the cause. A recent clinical congress held in Connecticut attracted for a period of a week more than 390 physicians, over two-thirds of the members of the Connecticut State Medical Society. In Kings County, Brooklyn, graduate courses in all of the various phases of medicine continue regularly almost through the year and attract daily from forty to several hundreds of physicians who are keeping themselves abreast in medical progress.

By means of medical periodicals many men learn what medicine is accomplishing from week to week or from year to year. The medical literature of the world today comprises more than 1,850 medical publications, the contents of which are regularly indexed every three months in the *Quarterly Cumulative Index Medicus*, published by the American Medical Association at a considerable loss. The outlay is a contribution to the progress of research and of medical practice in this country, and indeed in the whole world. No other country makes available a similar publication.

The progress of drug therapy is regularly watched and controlled by the Council on Pharmacy and Chemistry of the American Medical Association, which examines constantly new preparations in the fields of drugs, biologic preparations and glandular preparations and lists these preparations in the book, "New and Nonofficial Remedies," which annually gives a list of contributions in the field of medical treatment that have been found worth while.

The Council on Physical Therapy, recently established, is carefully investigating apparatus and technic for the administration of natural methods to the treatment of disease. A report shortly to be published analyzes the effects of heat when administered by electricity, hot water bottles, electric pads, diathermy, or any one of a number of other methods. Thus by watching the reports of these bureaus and councils and by studying carefully the medical periodical literature of today any member of the medical profession may know the things there are to know and may apply them in the daily care of disease.

A careful observer on the borderland of medical practice nevertheless is somewhat aghast to discover the period of time which seems to elapse before any new method of treatment, even when well established, filters down through the ranks of the specialist in internal medicine or in any other of the various branches of medical science to the general practitioner working alone perhaps in



some distant field. As simple a discovery as the use of liver diets in the treatment of pernicious anemia, although already available to the medical profession for more than a year, is not yet fully understood or applied in medical practice by many physicians. Here is a life-saving procedure which is simple in its application, but which nevertheless awaits general and complete medical adoption. Perhaps a part of the difficulty lies in the fact that the diagnosis of such a condition is to be made only by the application of examinations of the blood requiring at least a blood counting apparatus and a microscope. Rough and ready diagnosis of anemia made by the practitioner of an ancient day will not substitute for the careful laboratory methods necessary in the diagnosis of pernicious anemia.

More than a million patients in the United States suffer with varying degrees of diabetes. For years now scientific medicine has been in possession of knowledge relative to the dietary control of this condition, of knowledge concerning its treatment by insulin, and yet patients continue to die from diabetes at an unwarranted rate, and hundreds of Americans purchase regularly quack compounds of one type or another with which they attempt self-treatment of this serious condition.

The duty of the patient to his physician is a chapter which yet remains to be written in American literature. It is the duty of the patient to know enough of his own body to seek competent advice when that body becomes ill and to realize that the day of diagnosis and of healing by incantation, witchcraft and charms has long since passed.

As has been said, the hospital has been looked upon as the most adequate solution for all of the problems of healing, if not for the prevention of disease. In the hospital all of the intricate techniques that have been mentioned are made easily available to both patient and physician. There was a time when the leaders of the medical profession preached the gospel of a hospital in every county of the United States as the only solution of all medical problems. Today there is a call for a return to the general practitioner, for a return to the treatment of most conditions in the home, because hospitalization has developed problems as dangerous to the good of the community as would be perhaps complete neglect of disease.

The increasing cost of personnel and of hospital administration, of construction and of maintenance and particularly of nursing service, has made the minimum cost for the care of a patient in the hospital burdensome. The cost of hospital care has been increasing steadily. In 1912, the cost per day of hospital care varied from \$1.25 to \$2.55 per person. In 1921, the average cost per day for the care of a patient in a New York hospital was \$5.15, the highest cost being \$7.75 and the lowest \$4.00. In Chicago, in 1923, the average cost per day per patient was from \$5.00 to \$6.00. Obviously even \$5.00 per day is a consid-

erable drain on the purse of a person whose income is \$150.00 to \$250.00 per month. A study of the hospitals of Pennsylvania made in 1924 revealed the fact that 149 hospitals in that state received state aid. The daily per capita cost of maintenance of these hospitals was \$4.14. For every day of treatment the patients contributed \$2.73 and the state 59 cents. The remainder was made up by endowments, contributions, rents, and miscellaneous sources. The average duration of treatment per patient was thirteen days.

The increase in cost of hospital care during the past fifteen years has been about 150 percent. This increase is represented not only by the advance in cost of labor and supplies, but also by much of the progress in medical science that has been mentioned, by the provision of social service departments of the greatest importance for ultimate rehabilitation after illness, and by the bringing of all hospitals up to certain minimum standards.

Here obviously is a cost which cannot be borne by a person of the middle class and certainly not by one of the lower middle class. Thus hospitals are compelled to seek tremendous endowments in order that they may care for those who seek their aid. The solution of this problem would seem to lie in a recognition of the fact that careful diagnosis may frequently be made without all of the accessory tests that have been mentioned, that a dependence upon reason rather than on rays may sometimes yield a satisfactory result. If a little more care is taken as to the kind of patients that are hospitalized, if only such tests are made as seem to be especially required in the individual case, if patients who are hospitalized are treated more as individuals than as disordered robots, the individual costs are likely to be lessened. Finally, the middle class and the lower middle class citizen must realize that the mere existence in his body of illness does not put him at once in the class of a Ford or a Rockefeller.

The wastefulness of personal solicitude represented by thousands of dollars spent on flowers, fruits and other luxuries brought to the sick has never been added to the unnecessary cost of illness.

Nursing service has risen steadily in cost because of the increasing dependence of both physician and patient upon the nurse. Her education has been lengthened beyond all reason in comparison to what should be demanded of one who might well be in most cases merely an attendant or a companion to someone who lies ill. Thus it is that several institutions have already begun to educate two types of nurses in their training schools: a higher type fitted for positions as supervisors, superintendents, surgical and obstetrical nurses and teachers; and another type planned definitely to take temperatures, record pulse rates, administer drugs, prepare foods, and give those

soothing alcohol rubs that make all of the difference between a night of restless tossing and one of snoring unconsciousness. The solution of this problem does not call for any radical scrapping of present institutions or the construction of new ones. It demands merely a readjustment of present facilities and the recognition of the fact that illness does not change the economic status of those who are ailing.

More and more state health agencies, national health agencies, volunteer health organizations and commercial adventures of one type or another seem to be encroaching upon the legitimate practice of medicine. Sheppard Townerism was but one manifestation of the lengths to which legislation may be developed in order to win public favor by the gift of health advice and free medical treatment. Insurance organizations through compulsory examinations, through their insistence on examinations made by physicians at minimum fees, through the development of vast amounts of red tape and of paper work have made many physicians the tools of their trade. Such commercial exploitations of health and of preventive medicine as are represented by the Life Extension Institute, the National Bureau of Analysis and other organizations that aim to give health advice on the basis of a cursory questionnaire, a trifling survey and the examination of excretions shipped for thousands of miles, do not represent the proper application of modern scientific medicine to the public health. Routine examinations by health departments of thousands of citizens are not to be compared with the proper type of periodic physical examination made by an individual physician of his personal patient. Routine Schick tests and the administration of diphtheria toxin-antitoxin to millions of school children under the auspices of health departments is not a sane use of preventive medicine procedures. Preventive medicine must become and remain a part of the practice of an enlightened general practitioner who has realized that the medicine of the future is largely preventive, who has realized that the application of modern hygiene and sanitation must result eventually in the control of all of the communicable diseases that depend on food, water and sewage, and that it will be his duty in the future to take care of those preventive measures that involve the application of injections, vaccinations or examinations of individuals.

There is something about the science of medicine as applied to the human body that is distinctive from experiments made in the physical laboratory. The human being is possessed not only of a body but of a soul. An understanding of that human being is possible only to another human being who treats him as an individual and not as a robot or as a defective cog in the great revolving wheel that we call Mother Earth.

## THE COUNTY MEDICAL SOCIETY SECRETARY—THE GOAT\*

F. C. WARNSHUIS, M.D.  
(Secretary Michigan State  
Medical Association)

GRAND RAPIDS, MICHIGAN

President Cregor, Officers of the Indiana State Medical Association, and—the Goats, the County Secretaries:

The story is told—it is rather trite—of two Irishmen, two Scotchmen and two Englishmen who were shipwrecked on a desert island. The first day the two Irishmen got into a fight; the second day the Scotchmen had organized a Caledonian Society; but on the third day the two Englishmen were standing around waiting to be introduced to each other. That story has been illustrated in many instances as I have gone about in the work of organized medicine. The profession as a whole and as groups will stand around waiting to be introduced to themselves, not realizing what they might achieve did they but utilize the power that lies within them in the form of organized activity.

It was in 1902, on the second of June (you will pardon this personal reference) that I opened my office in Grand Rapids for the practice of medicine. In September of that year the Kent County Medical Society was organized under the reorganization plan of the American Medical Association that had been adopted in 1901. At that meeting, by some misfortune, I was elected treasurer of the society. From that I stepped into the office of secretary for seven years, and then I became secretary of the Michigan State Medical Association, which office I have held since that time. The time and effort I have devoted, and the demands that have been made upon me, have consumed a large portion of my time. As I said to Dr. Bulson this evening, if either he or I, or some of the other men engaged in organized medical work, had devoted the time to our own personal practice that we have to this work, probably we would not have to practice today. But that is neither here nor there.

The point I wish to make is that organized medicine as we know it, composed of county, state and national organizations, has only attained that which it has attained because of the work that has been done in different parts of the Union by men such as your representative men in Indiana, men who have devoted their time and energies to the work, sacrificing their own practices in order that what we have today might be achieved.

I cannot come to you men in Indiana and tell you how you should conduct your organized activities here. Medical organization has been a much twanged string, capable of producing many different notes, but the note is only reverberant as

\*Presented before the County Secretaries' Dinner and Conference at the Indianapolis Session of the Indiana State Medical Association, September 28, 1927.



the player on the instrument enters into the playing with enthusiasm, with a vision of what may be attained. It is true in every avenue of endeavor, that organized effort and activity bring about achievement. Organized effort in medicine will attain that which we seek, proving conclusively that the whole is stronger than the individual or the unit. So the plea I would like to make is, first, that you engender here in Indiana a spirit of organized activity, organized units, organized effort, not only in the matter of membership and paying your dues, and then telling the other fellow—"Let Tom, Dick or Harry do the work," but organized effort in which you do more than pay your dues. You must put more into your organization than the few dollars demanded of you by Tom every year. You must put into it some personal effort.

Your scheme of organization, like ours, is a democratic one in which we all have representation, in which we all have a voice, in which we all can have a part in building a monument to American medicine; but you must give something more than money; you must give personal effort.

I take it that I am speaking chiefly to secretaries of county organizations. There is a saying, "Show me the county secretary and I will show you the kind of society that exists in that county." That is true, because in that county's plan of organized activity the most important individual is the county secretary. It is not the president, it is not the board of directors, it is not the councilors, or any other executive officer; it is the county secretary, and if there are any among you here who have accepted the office of county secretary as an honor and are resting upon that laurel, and the simple fact that you may write your name as secretary of such-and-such county medical society, and have your name appear on the stationery on which you may jack up some of your patients who are slow in paying their bills—if that is your only object and effort, then for God's sake get out, because you do not belong there. It is more than an honorary position. It is the biggest, hardest working job that has ever been handed to any member of our profession, because on you devolves the success of your county unit, and only as your unit reaches 100 percent efficiency will your councilor district reach that point, and only as the councilor district reaches that point will the State society be 100 percent efficient and effective. I want to urge that the office of county secretary is important, and that it means a lot of hard work. It is not work merely on the day you have your county meeting, nor only when you have your monthly meetings, but you must think, eat, sleep and live the office twenty-four hours a day, giving the best of your time to planning activities. You can make that work hard, you can make it somewhat easy; but you must always be responsible for the governing of medical activities in the county. You must have the

fighting proclivities of a Bruggeman, the diplomacy of a Bulson, and the executive ability of Tom Hendricks. Then you have to have the personal qualifications which will enable you to go to a man and smooth out the difficulties he is having with the other fellow, either by fighting him, knocking him down, getting drunk with him, or maybe going fishing with him. You have to handle the situation according to the man you are dealing with. It is not yours to do all the work, but it is yours to guide and direct the work. May I suggest, by way of helping you in this work, some experiences we have had and a few ways in which this may be done.

Your program is one of the most important points. We recognize today that the time is past when a medical society can meet only for the discussion of scientific problems. We have other and broader obligations and relations to the people of the community in which we live. Your program committee is one of the most important committees in the society, first, because as your committee plans for the meetings, as it brings speakers who present subjects that are of scientific interest and value and not simply of the textbook type—as that is done your membership will turn out. I cannot tell you what may be the best program for Indianapolis, or what may be the best program for Gary, or for Fort Wayne; it all depends upon the community and the type of work done there. However, there is a general plan that has worked out efficiently with us in Michigan which we call the Minimum Program. A little over two years ago we established and worked out a minimum program scheme for county societies, and with your permission I will read an outline of that plan.

"For a number of years we have noted that county societies varied in their activity, influenced by the election of new officers. They manifested excellent scientific work and concentrated upon it, eliminating other obligations as well as neglecting opportunities of community education and economic advancement.

"To overcome such seemingly haphazard, un-directed policies a minimum program for county societies was formulated as follows:

"Section 1. Scientific.

"a. Ten meetings are to be held during the year. Local speakers are to appear before three meetings with definite planned discussions.

"b. A program of physical examinations shall be instituted in which all physician members shall agree to have a complete physical examination themselves and each shall agree to secure at least five patients who will agree to have complete physical examinations.

"Section 2. Social and Informal Activities.

"Each society is to have at least three dinner meetings. The speakers for these meetings shall be public speakers, educators, financiers, but not medical men. At least one picnic shall be held.

At least one social evening; in cooperation with members of closely related organizations, shall be arranged.

"Section 3. Scientific Teams.

"Each society shall have a group of two or three members who will prepare a program and give it on request before at least three other societies.

"Section 4. Public Health Information and Education.

"Each society shall plan to have at least one public health lecture group which shall give at least five lectures in cities and communities outside of their resident communities or cities. Adjoining counties are to be included. Each society shall cooperate and assist other organizations so that the following public lectures may be held:

"1 Lecture for each High School,

"1 Lecture for each Parent - Teacher Association,

"1 Lecture for each Luncheon Club,

"1 Lecture for each Woman's Club,

"1 Lecture for each Association of Commerce.

"Section 5. Publicity.

"Each meeting, scientific or public, shall be reported to the local newspapers in such form that at least one important point of value can be read by the reader.

"The secretary shall report each month to the State Medical Society the complete record of all activities and accomplishments."

There has been laid out, as you will see, a definite plan of county organization activity, dealing not only with the scientific side of the profession, but with relationships to the public and the education of the public as to true scientific medicine. It is a program that has awakened and intensified interest in Michigan because it has drafted from among the members men who are assigned duties and who through that assignment become interested in the achievements brought about and the interest aroused on the part of the public in things medical. In that way the education is of value not only to the individual men engaged in it, but to the county society and to the community. We have been obtaining wonderful organized activities as the result of such a program. I am not saying that this program will be applicable to Indiana. Some of its features you already have, through your Bureau of Publicity. We have them through our Extension Bureau, in which during the last year we had an attendance at the various meetings conducted through the state of something like 210,000 laymen who heard what our speakers had to say about the truths of scientific medicine. We have this as the slogan of the Bureau:

"The function of the joint committee is to present to the public the fundamental facts of modern scientific medicine for the purpose of building up sound public opinion relative to the questions of public and private health. It is concerned in bringing the truth to the people, not in supporting

or attacking any school, sect, or theory of medical practice. It will send out teachers, not advocates."

The effect of this program in Michigan the last year has been to place the profession of the state as a whole in better relationship to the people, who do not accuse us as much as they did of being self-centered, seeking only to feather our own nests. That is the result of organized activity, and I would commend it highly to you men as county secretaries.

You have accomplished very much by your Bureau of Publicity—it has done splendid work. I have watched it, and other men throughout the country have watched it, and we congratulate you upon the results you are obtaining. We have imitated you in Michigan by sending articles for release to our daily press.

But you as county secretaries must be everlastingly after the committees which you have appointed. In fact, you must be a spur if you are to obtain results from the committees appointed, because they are sometimes nothing better than some secretaries who rest upon their laurels of appointment, and at the end of the year when the time comes for a report they have none to make. That spirit has retarded organized medicine for twenty years. We have made wonderful progress in some respects, but we have failed woefully in others. I do not know who can offer a remedy or suggestion as to how we can arouse all the members of the profession into organized activity. I do not know what it is that induces men to sit back and see opportunities pass by where if they would only make a little personal effort they might achieve something for their own benefit and for the good of the profession and the community.

We have some eighteen or nineteen diversified activities conducted by our State organization. You, too, have a large number of activities that are well conducted, because it is no "applesauce" when I say to you that by reason of the time devoted by some of your leaders, Indiana stands well to the forefront of organized activities in medicine in this country; and it would be the first in organized medical activities in this country if the enthusiasm of the men who have attained what you have attained could be passed on and exemplified by the other men who have been holding back in the traces and retarding when they might have been accomplishing. I do not know anything more I can say in regard to organized activities except to urge that you as county secretaries must think, sleep, eat and live organization work.

Why it is that some secretaries will not answer correspondence, I do not know. Some of them you write a half dozen letters without a reply. I have one secretary that I no longer write or telegraph; I call him on long distance telephone. It is the only way I can get an answer. Some of them when they send in their dues use a prescription blank or the back of an envelope to make a



memorandum—sometimes they send too much money, and sometimes not enough, all of which has to be straightened out. All this might be avoided if the work was systematized at the time your meetings are held. I do not know why it is that when you do good work in the county you fail to send in a report to the journal. Your JOURNAL stands in the forefront of medical journalism in this country, and that has been due, as you will all admit, to the ability of the editor who has so long been at its head. But I know the troubles he has because we have the same kind in Michigan. Why you will not send in a report to the journal of your activities is more than I can understand. I sometimes try to urge some of our county societies that it is a duty because the journal is the historical record of the achievements of the profession, and certainly you want your attainments recorded for the benefit of those who may come after.

The problem of handling other problems in the community rests largely upon you. One cannot quite conceive why it is that a county secretary will accept office, will by haphazard achieve something, or in an equally haphazard way defeat something, and then when it comes to a meeting like this, or the House of Delegates, be the loudest kicker because the officers of the organization have not done this, that or the other. Tom cannot do it, Cregor cannot do it, Bulson cannot do it, the councilors cannot do it; it must be an organized activity, and as I said this afternoon in the House of Delegates, each one is responsible to fifty or more members who have sent him here as their representative, and as you go back from this meeting it is your duty to yourself as well as to those who sent you to seek to arouse in them the spirit of organized medicine as it exists today.

I shall take no time in discussing your local problems, but the one thing I want to urge upon you is that unless you want to work, unless you want to carry part of the burden and not be riding along without any expenditure of effort, unless you want to work day after day and night after night on these problems, then get out of office. If you want to work, then it will be a satisfaction to you. You will be criticized and cussed, and after it is all done there will be very little of personal reward, and the only epitaph I can suggest for you—for the faithful secretary—is this:

"Here lies Dr. Blank, a county secretary, who by his perseverance, tact and good cheer helped to strengthen, elevate and unite the profession in his locality. May he rest in peace, for neither peace nor rest had he in this world."

## TYPHOID FEVER IN INDIANA

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HEALTH  
INDIANAPOLIS

An analysis of the typhoid death rates for all the states in the United States registration area for the six years 1920-25 inclusive, is of vital interest to every individual in Indiana. Every medical man and public official should ponder well its significance, to the end that measures, radical if necessary, be taken to remove or combat existing conditions, which are responsible for our typhoid mortality which, at present, is a reproach to the state of Indiana.

During the period under consideration, as a glance at the accompanying chart will show, Indiana had a typhoid rate higher than any other of the northern states and four times higher than that of Massachusetts, which has the lowest rate. In other words, a person living in Indiana is four times as liable to die of typhoid fever than if he lived in Massachusetts. During this period Indiana lost 1,538 lives from typhoid fever. Had our rate been the same as Massachusetts, we would have had only 378 deaths, and 1,160 human lives, nearly all in young adult life, would have been saved to the state. A new-born baby is considered, in cold statistics, to have a cash value of over \$9,000 and an adult correspondingly more. On such a basis, Indiana suffered approximately a \$15,000,000 loss in this six-year period, all of which is preventable. Other states, living under conditions naturally worse, because Indiana is a comparatively new state and less densely populated, so conduct themselves, that their death rate is only one-fourth of ours. Consider our neighbors, who have comparable conditions of living. Ohio's death rate is sixty-nine per cent, Michigan's sixty-three per cent and Illinois' fifty-five per cent of ours.

What is the cause of our high mortality from typhoid fever? The answer is obvious and incontestable. There are still in this state people who will not go to the trouble and expense to provide protection of their water and food supplies and adequate disposal of their wastes. Also people do not protect themselves against the carelessness of themselves and others by means of vaccination against this disease and the natural sequence of events is a high typhoid death rate.

In 1926 there were three milk-borne epidemics of typhoid fever, involving some sixty-five cases and three deaths. The first occurred in Mooresville, Indiana. The first case came under the care of one of the physicians, who although he diagnosed the case as typhoid fever, did not report it to the health officer, the mother was not warned to disinfect and bury the excreta, nor was she warned not to put out the empty milk bottles for the dairyman. In three weeks other cases began

to develop on this one dairy man's milk route until sixteen cases in all developed.

A milk-borne epidemic of thirty-three cases developed in Elwood last fall and the first cases were nearly well before the State Board of Health heard of it. It was found when a request came to our laboratory for a large number of widal outfits and we phoned the health officer for information. Although the cases were not reported to the State Board of Health, the local health officer had been working alone and had the epidemic well in hand.

In May, 1922, there was a milk-borne epidemic in Warsaw, Indiana, involving some eight cases. In June and July the same year a milk-borne epidemic of some forty cases occurred at Winona Lake, Indiana, traced to a dairy man who supplied about eighty per cent of the milk and was a typhoid carrier.

In 1923 Fort Wayne had a milk-borne epidemic of twenty-six cases traced to a carrier who handled the milk. This epidemic ceased on closing the dairy only to break out afresh when the contaminated water from the St. Mary's river, into which

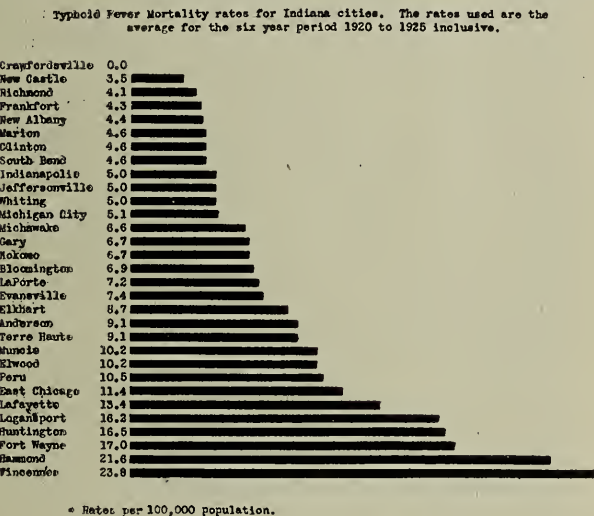
mile above the water intake. Such a combination requires a faith in the human manipulation of a mechanical device which is entirely unjustified. In December, 1924, there was an outbreak of typhoid fever in the city, of some dozen cases. Typhoid fever has been more or less endemic in this city. Recently a new intake has been installed above the sewer outlet and better results are hoped for.

Winona Lake in 1925 experienced an epidemic of typhoid fever when water from a contaminated surface-supply was pumped into their water mains through a dual connection. At the time some 40,000 people from several states were there attending a convention. Most of the people had gone home before taking sick but some 1,000 cases developed, which were traced to Winona Lake. There is now a regulation forbidding dual connections between public and contaminated water supplies and a repetition of the above incident should not occur.

A great many physicians still persist in diagnosing their prolonged fever cases as "typhomalaria," "intestinal flu," and "what-not," without the precaution of sending blood to a laboratory for agglutination tests. In 1919 the State Board of Health Laboratory examined 2,368 specimens of blood as against 888 in 1925 for typhoid agglutination. The incidence of typhoid fever during this period had not materially changed. Why there should be a yearly falling off in the use of the laboratory for aid in diagnosis is beyond understanding. Apparently not more than one in three cases of typhoid fever are diagnosed with the aid of a widal blood test. No physician should permit a laboratory test to confuse his clinical diagnosis, but no physician is so infallible that the aid of a laboratory would not improve his diagnosis and an accurate diagnosis is the first step in the control of the spread of the disease.

We see many cases of typhoid fever treated in the home. The mother is nurse and housekeeper. She will stop in the middle of the preparation of a meal to aid the patient evacuate his bowels and then return to her meal again. The first family ill in the Mooresville epidemic consisted of a mother and three sons. The mother had previously had the disease, and the three sons took the disease in succession. These were undoubtedly contact cases and had proper precautions been taken would probably have been prevented.

Last year Indiana had 207 deaths from typhoid fever and 728 cases reported. We know the average mortality is around one in ten cases, so on that basis our physicians are reporting about one case in three. The Indiana State Board of Health is equipped to investigate epidemics of all kinds and lend its services where and when needed, but if it is not informed of the presence of disease, it is unable to aid in its control.



the raw sewage, from the area where the above epidemic raged, was emptied, was forced into the city mains through a dual connection. This second outbreak involved some 150 patients. This epidemic was water-borne, secondary to the milk-borne epidemic two months previous.

In 1923 typhoid occurred in Liberty, Indiana, in epidemic form. The town water supply was obtained from a spring. There was also a pond held in reserve. A case of typhoid fever occurred in a family living on the watershed of this pond. After the case had recovered a rain flooded the privy and some of its contents was carried into the pond, contaminating the system, a typhoid epidemic resulting.

In the city of Washington, Indiana, the water supply is taken from White river, settled, filtered and chlorinated. The sewage from the city was emptied untreated into White river about half a



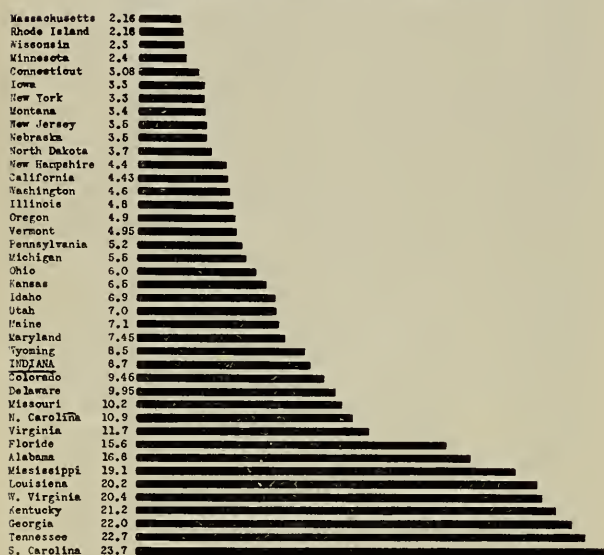
Indiana has now and has had ever since 1900, when it first came into the United States registration area, the highest typhoid death rate of any of the northern states. Every patient recovering from typhoid fever is a potential typhoid carrier. This being true, one can only estimate how frequently one comes in contact with such a carrier. Every woman is a food handler and likewise many men. We will never get rid of the constant danger of the typhoid carrier until we have eliminated the disease and cease to produce more carriers.

Typhoid fever has been eliminated, for all time from military life by a combination of vaccination and rational sanitation. The same conditions can be duplicated in private life if the people will co-operate with the health authorities.

The remedy is as follows:

1. Proper and adequate sewage disposal, both rural and municipal.
2. Safe water supplies constantly supervised.
3. Clean milk 100% pasteurized with both the dairy and pasteurization plant under adequate supervision.

Typhoid Fever Mortality Rate per 100,000. U. S. Registration Area  
Average Mortality Rate from 1920 to 1925 both inclusive.



Wyoming and Idaho data for four years only.  
Georgia and Iowa data for three years only.  
North Dakota data for two years only.  
West Virginia and Alabama data for one year only.

4. Adequate supervision of all food handlers and food-handling establishments.
5. Early diagnosis and rational care of all persons infected with typhoid fever and at least two negative stool examinations before patient is discharged as cured.
6. Report every case of typhoid fever as early as possible to the local health officer.

The factors involved in the etiology of typhoid fever have been aptly stated as "dirt," "diarrhoea" and "dinner." The infection is always spread directly from one human case or carrier to the patient through the medium of food or drink, contaminated by human excreta. In the larger cities this chain of infection is relatively easily broken.

The population being dense, the people are easily kept under supervision. The milk is usually supplied by a few distributors who have enough business that they can afford to handle the milk in a sanitary manner and pasteurize it by modern approved methods. Usually cities employ full-time inspectors, who supervise both the production and handling of the milk and where this inspection is properly conducted, milk-borne typhoid fever does not occur. The water is usually drawn from one public system which can be made safe by chlorine sterilization, if it is not already so, and competent engineers can be employed to supervise the system. Modern cities keep close supervision over all food-handling establishments and all employees are required to have medical examination, thus reducing the danger from disease carriers.

But what about the rural population in Indiana? What are we doing to protect our farm population from typhoid fever? Every county employs a county health commissioner at a maximum salary of one and one-half cents per capita in the county, providing the salary does not exceed \$1,500. It rarely exceeds \$500. The health officer is usually a busy physician, living and practicing medicine in the county seat. He has his own work to attend to and the public health work is necessarily a side issue. About how many trips into an average county will \$500 pay for at the usual rate charged by physicians? The state has no more right to expect a physician to do more than he is paid for, than has a physician a right to expect to be paid for more than he does. The state pays its local health officers little more than nothing for their services and can not expect to receive more than it pays for.

The urban dweller has not protected himself against typhoid fever when he has made safe his food and water supplies in his city. In this day and age of automobile transportation, a very great percentage of our urban population spend their week-ends and vacations on our highways and at our summer resorts, coming in contact with rural conditions at the tourist camps and homes of country relatives and friends. Some to avoid eating at questionable byway restaurants spread a picnic lunch on the roadside and share their meal with the flies from the nearest farm privy. To a very great extent, the urban typhoid fever rate is a reflection of rural conditions.

If Indiana is ever to establish modern rural sanitation together with adequate supervision over the country wells and farm dairies such as will be necessary to break the line of typhoid contamination of our food and water supplies then this state must provide funds in such amount as will be necessary to establish full-time health units throughout the state with trained personnel in charge of the units. The state is at present paying for its public health work on a basis of less than six cents per capita. New York State pays for its public health work 11.6 cents per capita,



Rhode Island 13.8 cents and Massachusetts 15.4 cents per capita. Last year Indiana lost 207 human lives from typhoid fever at a cash value of over \$2,000,000 and about as many more from smallpox and diphtheria and every one of these deaths were preventable. Public health and the prevention of communicable disease has a definite cash value. It is merely a question of how much a state is willing to pay for its health.

The responsibility for the control of typhoid fever is pretty evenly divided between the medical

profession, the municipal and state authorities and the people. Unless there is closer co-operation from all branches of society in the future, than there has been in the past, our mortality rate is not going to diminish very much. If every individual will take his own health and that of the public seriously, and co-operate wholeheartedly with the public health authorities then the utter elimination of typhoid fever together with smallpox and diphtheria could be realized by 1930.

#### HEMATOPOIETIC EFFECTS OF INTRAVENOUSLY INJECTED NUCLEIC ACIDS

Intravenous administration of the sodium salts of nucleic acids obtained from the blood cells of the fowl gave such interesting results on animals that it was thought justifiable by OLOF LARSWELL, N. W. JONES, H. T. NOKES and B. I. PHILLIPS, Portland, Ore. (*Jour. A. M. A.*, Aug. 27, 1927), to employ the method, with extreme caution, on human patients suffering from anemia. Accordingly, nucleic acids obtained by the Kessel-Neumann method were introduced intravenously in dosages of from 0.25 to 1 Gm., dissolved in physiologic sodium chloride solution, in a series of eleven patients. These patients were under hospital treatment and had been diagnosed as secondary and pernicious anemia cases, with various associated complications. The smallest dose of sodium nucleate administered, 0.25 Gm., was approximately the same as had been given to rabbits weighing from 2.3 to 2.5 Kg., and the largest dose (one case) was four times this amount. Rabbits had not shown symptoms of distress following the injections. Most of the patients, however, complained of chill and other transitory symptoms. In order to determine whether or not the spleen is a factor in the problem, four rabbits, which had been subjected to splenectomy twelve months previously for this purpose, and whose blood had become stabilized after this operation, as shown by repeated counts before administration of the sodium nucleate, were each injected with 0.364 Gm. of the substance, dissolved in salt solution. The immediate effects of the injection were striking. In each case there occurred a marked depression. In three of the rabbits this symptom came on in from eight to ten minutes, but in the fourth it was not so severe until two hours after injection. It is of interest to note that necropsy of the latter animal brought to light an accessory spleen nearly one third the size of the normal organ. There was extreme dyspnea, with coughing and sneezing, in all the animals of the series, the heart action became rapid and weak, and the animals became apathetic. They remained sick for three or four days, after which time they recovered. In the meantime, two of them showed a considerable increase in blood count. The other two showed some increase, but not enough to be considered significant in rabbits. Obviously, the spleen plays an important role in caring for the material introduced into the blood stream. One result is hematopoietic stimulation. In the human cases, no improvement had been noted from rest and other hospital treatment. The sodium nucleate injections were the only factors, so far as could be determined, which could have had any influence. Following injections of the nucleic acid compound, there was by the sixth to the twelfth day, in eight of ten cases in which a count was obtained during this period, an increase of from 1.8 to 25.9 per cent of erythrocytes above the preinjection counts. The maximum gain in the blood cell count varied in time between the first hour after injection to the twenty-seventh

day. If two cases which showed the maximum increase within three hours are set aside as possibly due to release of stored cells from the spleen, the remaining eight cases showed the greatest increase in count between the sixth and the twenty-seventh days after injection. One case showed an increase of 12.8 per cent, although not the maximum for this individual, on the seventh day. One patient had been subjected to splenectomy thirteen and one-half months prior to the treatment. He was given 1 Gm. of sodium nucleate intravenously, and showed symptoms of distress, with weakness, nausea, chills, etc., that continued for two days. These symptoms were much more severe than in any of the other patients, and continued for two days instead of a few hours. If due allowance is made for the larger dose, although two of the other patients had received 0.75 Gm. without corresponding symptoms, it appears likely that the absence of the spleen played some part in the severity and duration of the symptoms, as was true with the splenectomized rabbits. The cases were followed by repeated counts of the erythrocytes for periods varying between six and eighty-five days after injection, and showed a return in most instances to near the preinjection number of red corpuscles. The hemoglobin percentage showed an increase also in the majority of cases, but not in proportion to the increase of erythrocytes. The beneficial results of administering these compounds appear to cease when treatment is discontinued.

#### STUDY OF SKIN IN FIVE HUNDRED CASES OF DIABETES

Of the 500 patients examined by Arthur M. Greenwood, Boston (*Journal A. M. A.*, Sept. 3, 1927), 194 (39 per cent) were males and 306 (61 per cent) females; 124 patients (25 per cent) gave a history of skin disease, and 368 (75 per cent) said that they had never had any trouble with their skin. Thirty-three cases of pruritus either in the present or past were recorded. Of these cases, seventeen (51 per cent) were local, and sixteen (49 per cent) were general. In 115 cases (26 per cent) the skin was dry; in 327 (74 per cent) it was moist. This item was not recorded in the first cases examined, so that the total is less than 500. Forty-three per cent of the patients with dry skins had skin disease, and 29 per cent of those with moist skins had skin disease. There were 198 cases of epidermophytosis of the feet, including all types; *i. e.*, about 40 per cent. In 155 (79 per cent) of these the patients were in the last four decade groups—during the time when foot infection in diabetes is most serious. Roughly, one out of every two had fungus infection of the feet after 20 years of age. Furunculosis, carbuncles, erysipelas, psoriasis, epidermophytosis, xanthoma palpebrarum and Dupuytren's contraction show higher percentages than are found in the other groups. The percentage of skin disease of all kinds found in these 500 cases was 11.4 per cent. Dupuytren's contraction was present in eight cases. Greenwood would warn every diabetic patient that he is more liable than others to skin disease, particularly if he has a dry skin, and that his feet, so commonly infected by fungus diseases, must be looked after with more than ordinary attention.



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**EDITORIALS****THE INDIANAPOLIS SESSION**

Unusual enthusiasm and success marked the seventy-eighth annual session of the Indiana State Medical Association, which took place at the Indianapolis City Hospital, September 28, 29 and 30. With the entire new administration and surgical unit of the hospital thrown open for the convention, and with something doing almost every minute during the three convention days, the general opinion of the 1,431 physicians and their guests who registered was—"This is the best Indiana State Medical Association session we have ever attended." To uphold this general opinion is the fact that, despite the unsettled weather, the total registration of 1,431 physicians broke all previous state convention records by several hundred. The hospital proved to be almost an ideal place to hold a session, housing, as it did, the attractive commercial exhibits of thirty-nine firms, the registration and headquarters, and all the business and scientific meetings of the three-day session.

As you entered the hospital, nurses were on hand everywhere to guide you either along the interesting line of exhibits to the registration desk, or to the various meetings.

The convention opened Wednesday noon with a Council meeting at the Indianapolis Athletic Club, which was followed by the opening meeting of the House of Delegates at the City Hospital, and a golf tournament at the Indianapolis Country Club. Despite the constant rain, and the bad going, Dr. Paul Hurt of Indianapolis won the golf championship for 1927, with a low gross score of 82 over a field of 72 competitors, almost half of whom received valuable prizes which were presented at the smoker Wednesday evening. The evening smoker at the Athenæum was attended by almost 900. A group of physicians from the Indianapolis Medical Society presented the "Medical Frolic," the feature event of the evening. There was considerable difference of opinion among members of the Association concerning the appropriateness of the entertainment, even though it did show up considerable talent. The show was preceded by the annual dinner for the secretaries, councilors, and officers of the Association. At this dinner, Dr. J. C. Burkle, of Lafayette, was elected chairman of the Secretaries' Conference for the coming year, over Dr. A. M. Mitchell, thirty-four votes to thirty-two. Dr. F. C. Warnshuis, Speak-

er of the House of Delegates of the American Medical Association, and Secretary-Editor of the Michigan State Medical Society, was the speaker of the evening at the secretaries' dinner. He made a splendid talk which will be long remembered by all those present.

Thursday was given over to the scientific program. Starting with a general meeting, which was called to order by Dr. Frank W. Cregor, President of the Association, the program of the day might be said to be one of the most interesting and attractive in the history of Indiana medicine. As a rule the physicians who attended the convention seemed to like the clinical instruction, the new feature of the scientific program committee, which seemed to meet with general popularity. The general clinics were held in the Assembly Hall of the hospital, which was well suited to the type of program arranged. Amplifying machines were installed so that the speaker could be heard easily at all points of the room. Lanterns were supplied through the courtesy of the State Board of Health and operated by Raymond Bright of that department. Almost five hundred attended the banquet held Thursday evening, the principal feature of which was the address of Dr. Morris Fishbein, editor of *The Journal of the American Medical Association*, in which was discussed some of our medical problems and means for their solution.

One of the outstanding features of the convention was the delightful entertainment arranged for the ladies under the direction of the Woman's Auxiliary of the Indianapolis Medical Society. While the physicians attended the smoker Wednesday evening at the Athenæum, the women held a musicale at the Department Club, and formed an Indiana Chapter of the Woman's Auxiliary. Mrs. Frank W. Cregor, of Indianapolis, was elected president, and Mrs. W. R. Davidson, of Evansville, was named president-elect. Following a visit to the City and Riley Hospitals on Thursday, the ladies held a luncheon-bridge at the Marott Hotel. Under the guidance of the Convention Bureau of the Indianapolis Chamber of Commerce, the women made a tour of inspection of the Real Silk Hosiery Mills of Indianapolis.

The many class and fraternity dinners held during the convention were some of the most enthusiastic and interesting gatherings of the entire convention. The women physicians of Indiana held a luncheon Thursday at the Riley Hospital, which was well attended. Dr. Nettie Powell, of Marion, and Dr. Jane Ketcham, of Indianapolis, gave the principal talks.

Dr. Charles E. Gillespie, of Seymour, was named president-elect for 1929 by acclamation. He will take the place now occupied by Dr. George R. Daniels, of Marion, who will become president of the Association on January 1. Dr. Wm. E. Doeppers, of Indianapolis, was re-elected treasurer, and Dr. Albert E. Bulson, Jr., of Fort

Wayne, and Dr. E. M. Shanklin, of Hammond, were elected delegates to the American Medical Association for the next two years. Dr. Donald C. McClelland, of Lafayette, and Dr. B. G. Keeney, of Shelbyville were chosen alternates. Dr. M. A. Austin, of Anderson, was renamed councilor for the eighth district for three years; and Dr. G. D. Scott, of Sullivan, was elected councilor for the second district to succeed Dr. Joseph Smadel, of Vincennes. All these officers were elected by unanimous vote without any contest.

The big contest came in the selection of the convention city for 1928, Gary finally being chosen by a big majority over Michigan City and Lafayette.

The convention broke up Friday morning after a meeting of the House of Delegates and Council followed by a most interesting scientific program.

### BIRTH CONTROL

FOR many years the subject of birth control has been one of debate. It is a subject that should be handled with great care. Physicians are in charge of a great responsibility when asked to decide the question of when to give out knowledge as to the means of contraception. Concerning this matter Parvin says, "one has no right to put into the hands of another a loaded pistol, when it is probable he will use it for homicide or suicide. We are morally responsible for imparting knowledge which we know will be used for evil." It may seem necessary to give knowledge concerning means of contraception to some persons, but it will not be kept secret by the recipients, and will be imparted to others who have no just excuse for the avoidance of child-bearing. Furthermore, this knowledge undoubtedly will become general, "and thus a strong defense to the virtue of women is taken away and the purity of countless lives and the peace of countless homes is sacrificed to man's selfishness." Concerning this matter, Mosher says, in his address before the American Association of Obstetricians, at Chicago in 1926: "Let it be recognized that frequent child-bearing is in some women the cause of rapidly failing health and strength. Children come faster than the means to care properly for them is acquired. Infants are born with feeble organization, or hereditary taint, and as time goes on they may prove defective in mental power or of moral bad character, so that one may be tempted to say, 'Better had he never been born,' or 'Better dead than living.' Nevertheless, all the condescension of law acknowledged, and these conditions of fact admitted, and even though we may not believe that the back is always given the strength to bear its burden, or the wind is tempered to the shorn lamb, Parvin argues that the physician takes a great responsibility who endeavors to thwart the law of nature." Mosher further says that birth control

is a doctrine which applies to the wrong element of the population, and he quotes Kosmak to the effect that "we need birth release, not birth control." It is inexpedient to release for the public information without discriminatory precaution which would, in the end, be most detrimental to the community. Instead of the founding of birth control clinics, where uncertain and sometimes ridiculous contraceptive propaganda is given out, Dr. Kosmak advises that training in sex education should begin in the schools in a healthy, clean study of the matter as a part of biology. Such advice as need be given by the physician, in the presence of definite pathological indications, should be restricted to individual cases as a medical, not an economic, measure.

### ACCOMPLISHMENTS OF THE ROCKEFELLER FOUNDATION

Recently we have received a review of the work of the Rockefeller Foundation for the year 1926 and we really are amazed at not only the quantity but the character of the work that has been carried on under the patronage of the Foundation. During the year the Foundation disbursed nearly ten million dollars and, in brief, it was spent as follows: (1) aided the growth of fourteen medical schools in ten different countries; (2) maintained a modern medical school and teaching hospital in Peking; (3) assisted the development of professional public health training in fifteen institutions in twelve countries and in ten field stations in the United States and Europe; (4) contributed to nurses training schools in the United States, Brazil, France, Poland, Jugoslavia, China, Japan, and Siam; (5) sent, as emergency aid, journals, books, or laboratory supplies to institutions in twenty European countries; (6) helped twenty-one governments to combat hookworm disease; (7) gave funds to organized rural health services in 244 counties in the United States and to thirty-four districts in twelve other countries; (8) shared in the creation or support of various departments in state or national health services in sixteen countries; (9) cooperated with Brazil in the control of yellow fever, or in precautionary measures against the yellow fever mosquito, in ten states; (10) continued yellow fever surveys and studies in Nigeria and on the Gold Coast; (11) aided efforts to show the possibilities of controlling malaria in nine North American states and in Porto Rico, Nicaragua, Salvador, Argentina, Brazil, Italy, Spain, Poland, Palestine, and the Philippine Islands; (12) helped to improve the teaching of physics, chemistry, and biology in eleven institutions in China and in the government university of Siam; (13) supported the Institute of Biological Research of the Johns Hopkins University and contributed toward the publication of *Biological Abstracts*; (14) gave funds for biological or mental research at Yale University, the



State University of Iowa, and the Marine Biological Station at Pacific Grove, California; (15) provided, directly or indirectly, fellowships for 889 men and women from forty-eight different countries, and paid the traveling expenses of sixty-nine officials or professors making study visits either individually or in commissions; (16) helped the Health Committee of the League of Nations to conduct international study tours or interchanges for 120 health officers from forty-eight countries; (17) continued to aid the League's information service on communicable diseases; (18) made surveys of health conditions, medical education, nursing, biology, or anthropology in thirty-one countries; (19) lent staff members as consultants and made minor gifts to many governments and institutions; (20) assisted mental hygiene projects both in the United States and in Canada, demonstrations in dispensary development in New York City, and other undertakings in public health, medical education, and allied fields.

The president of the Foundation says that the effectiveness of a national system of public health service depends upon the appropriate and cooperative development of scientific research, medical education, the training of health officers, laboratory workers, engineers and nurses, the creation of central services, the organization of administrative units, the enactment of appropriate legislation, the provision of adequate funds and the development of sound public opinion. It is within this general field of medical research and teaching, training of health and personnel and organization of health services that the Rockefeller Foundation finds its chief opportunity to lend a hand. It deals almost exclusively with universities or with government agencies, local, state or national, and with these only upon their invitation. The constant aim is to stimulate progress, to encourage experiment, to demonstrate new methods to increase efficiency. It wants to be a partner, not a patron. The Foundation succeeds best when it can withdraw completely from a health project when it continues as it began under official auspices and supported wholly by public funds. So far as medical education is concerned, the program which makes the strongest appeal to the Foundation is one that includes the bringing together on one site of medical laboratories and teaching hospitals, the bringing of laboratory investigators and teachers from all outside duties and the creation of a few clinical professorships whose holders are able to devote themselves to the care of patients, to research, and to teaching on a university basis. Of especial interest to the Foundation is the subject of disease prevention, and here the public health program of the Foundation includes demonstrations in combating specific diseases, such as hookworm disease, malaria, and yellow fever; aids in improving central health departments which have to do with laboratories, vital

statistics, sanitary engineering and epidemic control, cooperation in the organization of rural health services with full time personnel, the making of surveys, provision of field training and experienced health officers and other forms of health service. The Foundation recognizes that a modern health organization that is active and effective in its work requires a multiplicity of action, functionaries, equipment and funds. The creation and maintenance in any country of a going concern requires that research must be encouraged and intercourse with world centers of investigation must be kept up in order to have the essential scientific basis for effective work. In the next place the medical profession must be intelligent and sympathetic. The physicians of the country can make or break a public health program. It is they who diagnose maladies, report cases of communicable disease, educate their patients, make health examinations, give advice about personal hygiene and form public opinion. It makes a world of difference whether practitioners are wholly devoted to individual ills and curative medicine or are committed to the modern idea of prevention. The progress of public health is largely due to the leadership of doctors of imagination and public spirit. To its medical schools a country must look for the kind of training and idealism which will produce doctors of the new type. Medical education is a vital factor in the development of public health. It is with a view to aiding in the creating and maintenance of all the multiplicity of agencies required in this vast scheme of health conservation and disease prevention that the Foundation finds its greatest usefulness, and the work accomplished, as indicated by what has been enumerated, is without comparison.

#### UNNECESSARY HOSPITALIZATION AND NURSING

In this number of *THE JOURNAL* we present the address of Dr. Morris Fishbein, editor of the *Journal of the American Medical Association*, delivered recently before our Association, in which attention is called to the economic side of sickness, a subject discussed on several occasions in this *JOURNAL*. He refers to the growing tendency to increase the cost of sickness, aided by physicians who encourage their patients to indulge in superfluous hospitalization and unnecessary service of highly trained nurses.

It is probably true, as stated by Dr. Chas. H. Mayo, that fully ninety percent of all sickness does not actually require hospitalization. That is particularly true of the sickness of patients belonging to the self-supporting middle class who live in the smaller cities, towns and country, owning their own homes or even renting homes that are quite comfortable and possessed of all of the modern conveniences. It may be that city dwellers in flats, where a three or four-room apartment has to do service for eating, sleeping, bridge.

radio and entertainment of all sorts, are almost forced through lack of house room and conveniences to go to a hospital when sick, but for the most of those belonging to the great middle class, in Indiana for instance, such an emergency is not as common. It probably is also true that a large number of people who could be taken care of in their homes when sick are encouraged by the attending physician to go to a hospital, not because of real necessity but because of the convenience to the physician himself. Likewise, if sickness is cared for in the home there is altogether too great a tendency to require the services of a trained nurse when perhaps a practical nurse or even a sensible attendant without training or experience in nursing could answer all of the requirements. Even when the patient goes to the hospital there is altogether too frequently shown a tendency on the part of the physician and even the hospital management to encourage the employment of a trained nurse at six to eight dollars per day, to say nothing of the board for the nurse that is charged by the hospital, and in addition the usual hospital charges of from six to ten dollars per day.

We recognize that in severe illness the hospital and even a trained nurse may be a necessity, but for eighty to ninety percent of the illnesses afflicting mankind neither a hospital nor a trained nurse are an absolute necessity but must be classed as a luxury, and to those in moderate circumstances such luxury requires a financial outlay that is a great hardship. Sickness becomes, therefore, an economic problem for the great middle or self-supporting class, or perhaps we should say for those earning salaries not to exceed two to five thousand dollars per year. In fact, many a family has been financially embarrassed for a long period of time as a result of superfluous and unnecessary money outlay in case of sickness.

Last but not least, the physician suffers, for the bulk of his work is for people belonging to the middle class, and he is the last to be paid and oftentimes is not paid at all if his patient has been financially drained by the extravagant expenditure of money for hospitalization and nursing. The problem is a serious one, as must be admitted, and the answer is not arrived at by having a part or all of the expense borne by federal, state, or municipal taxation and with services largely or wholly donated. In fact, pauperization of people from too much gratuitous service of any kind spells disaster in our body politic. The deserving poor can be and are cared for through charity, either public or private, but how to take care of sickness in the self-supporting without making it unduly burdensome or causing the recipients to lose self-respect is a real problem. The question must be solved by greater discrimination on the part of both patient and physician in the decision to seek hospitalization and expert nursing care. The attending physician will do a great deal

toward effecting economy for his patient and at the same time making it more possible for himself to secure adequate compensation for his services if he discourages hospitalization for the ordinary illness, and likewise discourages the employment of highly trained nurses at large expense in any cases except those plainly indicating the need for such attention.

While we are on this subject of nursing we wish to endorse the statement made by Dr. Charles H. Mayo to the effect that we need in this country thousands of attendants for the sick who have been educated in the rudiments of nursing only, and who do not profess to be highly specialized or trained nurses, nor expect nor demand the large and justifiable fees charged by the trained nurses who often object or refuse to go into private homes, and if they do go into private homes require more waiting on for themselves than they are worth. The average home of today is a modern home, and any young woman trained in the rudiments of nursing and having the slightest enterprise and energy can take care of the average sickness in any home, and without putting the family to unnecessary trouble or expense in supplying their wants. In short, for average sickness, what we should aim to do is to make it as inexpensive for our patient as possible while at the same time not abolishing nor curtailing any of the necessities or requirements that make for the attainment of the desired result. At the present time there is too much of a tendency to see how expensive we can make sickness, and in this matter of expense the fee paid to the attending physician is in a majority of instances the least expense of all.

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#### FEE SPLITTING

*The Medical Journal and Record* of New York has sent out a questionnaire on fee splitting which amuses us very much because of its puerility. The editor has said, naively, that his object in presenting the questionnaire to prominent physicians is to ascertain to what extent fee splitting prevails and to determine the attitude of the leading men of the medical profession toward this practice. As a matter of fact he knows that the question is superfluous, for there is every reason to think that some of the members of the medical profession are just as dishonest and just as much given to objectionable commercial practices as those following any other vocation. He also knows that his questionnaire fell flat insofar as it obtained trustworthy replies, for there isn't one fee divider out of a thousand that will admit openly that he is guilty of the practice, whether he is the giver or the receiver of the fee. There are some who perhaps practice division of fees under a guise, and juggle the proposition by trying to make out that payment is being made for services rendered, but the fact remains that the whole proposition is



tainted with rank commercialism. To ask for suggestions as to remedial measures also stamps the questionnaire as puerile in its conception, for the editor well knows that there is no incentive for the division of fees except the desire for gain in an unfair way. There is an old saying that "every tub should stand on its own bottom," and it applies to the question under consideration. Every doctor who refers a patient to another deserves and should have adequate compensation for the services rendered, but he and he alone should estimate the value of those services and try to collect the fee from the patient without the aid of a second party. When he does that he is honest with himself, and he is honest with his patient. If he does otherwise he is putting himself in a false position because, by inference, it is fair to conclude that he has something to fear if he personally collects his fee, and that he is referring the patient in a certain way because of the financial gain secured in consequence. Furthermore, in communities where the division of fees is practiced it often happens that the surgeon or specialist having the largest practice, and known to be a fee divider, comes far from being the best of the kind in the community. In short he may be a very mediocre man from the standpoint of education and training and yet as a direct result of his commercialistic tendencies and the ignoble desire on the part of referring physicians to obtain fees, he builds up a large practice, oftentimes at the expense of his patients who deserve better consideration. From the standpoint of the referring physician, common sense indicates that he should charge and collect his fee independently and not expect others to do it for him. The discussion of the subject on the basis proposed by the editor of the *Medical Journal and Record* seems to us to be an effort to whitewash or make acceptable a practice that is inherently bad and deserving of no consideration from right-minded physicians.

### CULTS DISCREDITED IN TIME OF DISASTER

At a time of great disaster, when there are sick and dying on every hand, the quacks, medical pretenders and drugless sects of every variety stand no show of recognition. Well-educated, adequately trained, and experienced physicians of the regular school are the ones who receive the calls. This was proven recently during the devastating flood in the South. The United States Public Health Service, the Red Cross, and the organized regular profession through its constituted authorities, did an enormous amount of work in caring for the besieged people. Fifty million grains of quinine were given to flood victims, and nearly a million people received vaccine for typhoid, and smallpox. We haven't heard a peep from the drugless therapists and the various anti-vaccination societies concerning this work done by the Red Cross and the United States Public

Health Service in preventing disease. The public deserves to know what was done and what was accomplished by scientific medicine in the great flood regions, so that due appraisal may be made of means and methods employed by those who know as compared to what usually is done by those who do not know. If there is any one thing that should be an object lesson to the lay public it is a recognition of the fact that in time of disaster no one wants the chiropractors, osteopaths, mechanotherapists, christian scientists, or anyone else belonging to the horde of medical pretenders that prey like vultures upon the sick and suffering if given an opportunity. In other words, in time of disaster, it is scientific medicine that comes to the front, and no one wants anything else at that time. Why should they want it at any other time?

### IMMUNIZATION AGAINST DIPHTHERIA

In *Therapeutic Notes* for August, 1927, some questions concerning immunization against diphtheria have been asked and are so pertinent, and the answers so illuminating, that we feel disposed to reprint the article, which is as follows:

#### Questions:

1. Can a person have diphtheria twice?
2. If the immunity from an attack is only temporary, in your opinion how long does it last?
3. If an attack does not leave permanent immunity, on what theory could the use of toxin-antitoxin do so?
4. Do you claim permanent immunity from the use of toxin-antitoxin?
5. Why is not the use of toxin and antitoxin in the same dose incompatible?
6. Can you explain why some children show a positive and some a negative Schick reaction?

#### Answers:

1. One attack of diphtheria does not confer the same immunity against the disease as is the case with some other acute infections, such as smallpox, scarlet fever, and measles. It is stated in Tice's "Practice of Medicine," vol. 3, p. 137, that "relapses may take place during convalescence or the disease may recur in three or four weeks or any time after recovery. Two attacks or even three attacks at remote periods after the first one are not at all uncommon and are dependent upon individual predisposition to the disease and opportunity for infection."

2. Continuing the answer to the first question in answering the second, it can be stated that second and even third attacks of diphtheria are not uncommon. The recurrence of diphtheria in an individual who has suffered one attack may be due to the fact that the body cells respond slowly to diphtheria toxin without producing antitoxin, and the ordinary attack of diphtheria is too brief in duration for adequate stimulation of antitoxin production. This is indicated by the fact that several months are required for the production of sufficient amounts of antitoxin to effect immunity after the injection of toxin-antitoxin mixture. Probably other immunity principles are also concerned both in affording protection and in recovery—especially phagocytosis. Bacteriolysins and opsonins are sometimes demonstrable during diphtheria and probably contribute to the mechanism of recovery.

3. This question is answered theoretically in the foregoing. The duration of immunity from toxin-antitoxin cannot be definitely stated. The duration must depend, to a certain extent at least, upon the individual. Park followed the duration of immunity among susceptible



individuals as determined by the Schick test, comprising a total of about 10,000 infants, children and adults in ten different institutions. From among these a selected group of children was studied for a period of seven years, and it was shown that the active immunity persisted in the great majority of these children for at least that length of time. It is possible that the immunity induced by the injection of toxin-antitoxin starts a cellular production of antitoxin which otherwise would have happened much later in life, or the presence of diphtheria bacilli in the throat may excite the antitoxin production.

4. Neither we nor anyone else can make such a claim. Schroeder (*Archives of Pediatrics*, 1921, 38, p. 368) found in one series of children that the immunity persisted for five years. Kolmer states that a child successfully immunized at four years of age may expect protection at least until 12 to 15 years of age, at which time natural immunity will have probably developed to such a degree as to afford protection for the rest of his life. Leading authorities, including Park, Zingher, Kolmer and others, believe that the immunity may persist for a lifetime. Not until toxin-antitoxin mixture has been used for a sufficient time can actual determination regarding the permanency of immunity be formulated. You will probably recall that Behring deserves the credit for the discovery of the method of applying T-A Mixture for immunization against diphtheria. His investigations were cut short in 1913 because of the war. The New York City Board of Health Laboratory has applied this test since about 1915 and has been carefully watching the results.

5. A mixture of toxin and antitoxin is not incompatible in the chemical sense. The mechanism of toxin-antitoxin immunization is based upon the principle that the union of toxin and antitoxin is not stable, and when a neutral mixture of the two is injected into animals sufficient toxin becomes dissociated gradually to unite with body cells and stimulate the production of antitoxin. When the mixture is made up for injection, the antitoxin binds the molecules of toxin, thus preventing them from producing symptoms. By gradual dissolution, however, the antitoxin slowly allows the toxin to become absorbed, probably in very minute quantities. This method of immunization therefore cannot be regarded as a complete action, but is clearly a process of active immunization by virtue of which the toxin stimulates the body cells to produce antitoxin.

6. To answer this question would be an attempt to elucidate theories concerning natural immunity. Why some people are immune to certain diseases or why certain races or certain species of animals are immune to others is difficult to explain. At any rate, we know that all human beings are susceptible to diphtheria and that if a specimen of blood serum is collected from a series of individuals, some specimens will be found to contain an appreciable amount of diphtheria antitoxin. This can be easily determined by subjecting such specimens of blood serum to the routine potency tests on guinea-pigs. Children up to six months of age are generally immune to diphtheria by reason of congenital antitoxin immunity conferred by the mother. After 6 to 8 months the immunity gradually disappears in the majority of children. The age of greatest susceptibility to diphtheria is between 1 and 7 years. At ten to twelve years a natural immunity develops in many individuals, and particularly in the crowded quarters of cities. Sixty to seventy percent of adults are naturally immune.

OH, gée, the other day we saw a physician who greases his hair. Perhaps axle grease would be appropriate for one with wheels in his head. His name wasn't Percival, but should have been Kitty or Rosalie. We hope that the Lord will continue to give us strength to resist hitting a guy like that!

## EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

It will be Gary in 1928, and we look for a very satisfactory session. In business as well as professional life Gary shows enthusiasm and enterprise. Therefore, look for great things from Gary.

A PROMINENT member of the Indiana State Medical Association says that the "medical follies" should have been fumigated and sterilized before presentation. Certainly some form of expurgation was indicated.

MANY people are selecting the beautiful fall days for motor trips, and it would be well for physicians to point out the danger of typhoid and the advisability of accepting typhoid vaccination the value of which as a preventive measure has been established beyond question.

DR. G. W. H. KEMPER, of Muncie, "The grand old man of medicine," died at his home in Muncie on September 26 at the ripe old age of eighty-seven. His life and work were exemplary and should command the respect of the medical men of the younger generation.

PHYSICIANS are more imposed upon than people following any other vocation. The physicians themselves are largely responsible for this state of affairs, and all because they are altogether too lenient with patients. Physicians who have spunk enough to stand up for their interests usually are thought more of than those who are vacillating and easy-going in manner.

PERHAPS the talking pictures of the future will be of immense value in medical teaching. The great clinicians of the world can have every step of the work done upon a patient recorded in the picture and with it his spoken explanation therewith. It is difficult to predict what advancement may be expected as the result of the creative genius of man. Medical science is keeping abreast of development of other fields of human endeavor.

THE physicians in Montreal should have been doing a land office business in typhoid vaccination



if they have been doing their duty. Perhaps for Montreal an epidemic of typhoid fever will prove a great lesson if the facts are made public as they should be. The great stumbling block in disease prevention is the tendency on the part of newspapers and public to minimize the effect of epidemics.

It isn't the fault of *THE JOURNAL* if you do not get as much news as you think you ought to have concerning the activities of the Indiana State Board of Health, the medical department of the Indiana University, or the work of county and district medical societies, for all of these various organizations have been asked repeatedly to furnish news notes and reports concerning their activities.

AN attendance of nearly 1,500 at the Indianapolis session! Isn't that great, and doesn't it show increasing interest in all that pertains to medical progress? We are inclined to think that the clinical feature had much to do with the large attendance of the membership. Within reasonable limits we believe that a continuation of the clinical feature will prove acceptable to the entire membership.

It is unfortunate that we have no very effective method of treatment of tetanus. However, we do have a preventive treatment, and prevention is best obtained by the immediate administration of anti-tetanic serum in those cases where there is the slightest possibility of the bacillus of tetanus having been introduced. This fact should be impressed upon every medical man who is called upon to treat wounds of any character that offer a suspicion of contamination by tetanus bacilli.

THE radio has been prostituted to commercial ends by the quacks and medical pretenders. Up to the present time, so far as we know, the screen has not met a like fate. We have received advance notice that the Pathe organization is about to present a moving picture entitled "The Country Doctor," which will be dedicated to the doctors of America and is said to be a real tribute to the profession. We hope that the picture symbolizes scientific medicine and not any of the irrational and misleading theories and practices of any of the cults.

TOM HENDRICKS, the genial and efficient executive secretary of the Indiana State Medical Association, recently has been swollen up like a poisoned pup and has come within an inch of "busting." Reason: Tom is the father of a newborn baby girl who came into the world on October 5. Tom's heart is in the right place, but he will sanction the announcement that a good Corona cigar is not to be given to each and every member of the Indiana State Medical Association in con-

sequence of this new addition to Tom's family, and the time-honored custom of passing cigars on such an auspicious occasion.

IN the September number of *THE JOURNAL* we said, "What has become of all of the high frequency outfits that used to clutter up the offices of about two out of three physicians in every town?" To this inquiry one of our readers answered, "They are in the chiropractors' offices and they sure do play hell with my radio!" None of the chiropractors know how to use high frequency outfits, or any other modality employed in the treatment of disease, but that doesn't cut any figure. The chiropractor is long on salesmanship, and he is taught to sell his wares through the medium of buncombe, and high frequency outfits help in carrying on the deception.

THE disciples of Abrams and Koch, meeting in convention in Chicago, have declared that the use of tobacco by the pregnant woman is very injurious to health and especially to the expected child. In fact, tobacco for any woman during the child-bearing period is condemned. Now comes Arthur Brisbane, the well-known columnist, who declares that tobacco mars the beauty of women. This latter edict probably will have some effect upon women who at all times are willing to do most anything to preserve their beauty. Anyway, Brisbane and the Abrams followers have definitely settled the question of the dangers of tobacco using by the female of the species.

FOUR hundred thousand dollars was appropriated by Congress for the remodeling and refurnishing of the White House. The work has been done, and it is reported that the contractors did not use up the amount appropriated but are returning forty thousand dollars to the treasury. This sounds too good to be true. In fact, it sounds like a good fish story. We never heard of a contractor or contractors failing to use up an appropriation. In federal, state and municipal work appropriations are easy picking, and if anything has been left from this appropriation for repairing and refurnishing the White House then we move that the contractors be given a medal and their names be inscribed in the Hall of Fame.

IF there is anything that brings gray hairs to a physician it is to run up against non-appreciative patients who not only fail to pay for professional services rendered but who go out of their way to do the physician harm after rendering the finest kind of service. We have in mind one patient whose life was saved by a timely appendicitis operation and who months afterward, when asked to pay something on his account, threatened to sue the surgeon for malpractice because the convalescence was prolonged. The patient had a ruptured appendix. The surgeon was prevented

by his friends from giving the ungrateful patient a sound thrashing. It is too bad that some such despicable human skunks are not thrashed.

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THE podiatrists are under the control of the State Board of Medical Registration and Examination. We wonder how long it will be before the cosmeticians and the tonsorial artists also will be under the control of the same board. The cosmeticians are giving all sorts of facial and scalp treatment, to say nothing of performing minor operations, and many of the barbers are employing chiropractic without having gone through the formality of identifying themselves with the chiropractors. Many people seem to think that monkeying with various ills and deformities of the human body furnishes rich picking, and they proceed to take advantage of the credulity of anyone who will accept their ministrations.

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ORIGINALLY it was intended that the governor of Indiana would deliver the address of welcome at the Indianapolis session of our Association, and in the event that the governor was not available the mayor of Indianapolis would be selected to greet those attending the convention. However, the nearer the time approached for the convention the greater became the possibility that the governor might be in state's prison and the mayor in jail, so the address of welcome was cut out. There has been so much rottenness in public life in Indiana that we hesitate to look favorably upon any person in public office, but there is going to be a housecleaning and some day Indiana will take its place among states that maintain an honest and efficient government.

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MANY reasons could be advanced for standardizing our weights and measures. Our present system is a hopeless jumble of inches, feet, miles, ounces, pounds, tons, gills, pints, quarts, gallons, pecks, bushels, etc., *ad infinitum*. There is neither rhyme nor reason between our linear weight, wet and dry measures. Our currency is on a metric system, and there is no reason why the metric system should not be used for weights and measures. The metric system is simple, definite, and clearly related. Its adoption may for a short while cause confusion, but it would be temporary and of minor concern as compared to the inestimable benefit arising from a standardization that is not only justified but necessary in order to get away from the archaic system of weights and measures that now prevails.

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No matter what argument is advanced concerning the dangers of class distinction and the necessity of having equal rights and privileges for every citizen of the United States, our sympathies are entirely with the Gary High School students who ask for segregation of colored students.

There are some ingredients that will not mix satisfactorily, and our white and colored population will not mix in our public schools, theaters, churches or other places where audiences congregate. We would not deny the colored children the advantages that are afforded white children, but there is no particular reason why white and colored children should be associated together in securing advantages which come from our public school system or any other system that requires close relationship.

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INDIANA has shown creative genius and ability in many fields of human endeavor. Just now we are crowing over the work of one of our biological laboratories which, in co-operation with leading medical investigators is largely responsible for insulin in the treatment of diabetes, liver extract in the treatment of pernicious anemia, and the serum treatment for infantile paralysis. Of course we occasionally send a governor to a federal prison, indite another for bribery, and generally expose and punish rottenness in high places, but that is only a part of a program of doing things in Indiana that are worth doing, and while the county at large may be pointing a finger at us for corruption in public life it should be remembered that we have a long list of big things to our credit, and our medical men are adding to the sum total.

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WE desire to go on record as opposed to the character of the entertainment provided for the members of the Indiana State Medical Association at its recent session at Indianapolis and scheduled on the program as the "medical follies." While individual tastes vary widely, we refuse to believe that any considerable number of business or professional men of good reputation derive any enjoyment from an entertainment liberally supplied with vulgar jokes. Furthermore, physicians as a class have a peculiar responsibility to maintain the very highest standard of professional conduct, and such standards are gravely jeopardized by the semi-public display of objectionable and indecent jokes. The gentlemen who gave the performance all showed marked ability as amateur performers, and it is a matter of great regret that enjoyment of their efforts must be prejudiced.

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IF any member of the Indiana State Medical Association is having trouble in collecting bills for professional services rendered in industrial cases he should get in touch with the committee on industrial and civic relations of our Association, of which Dr. F. S. Crockett, of Lafayette, is chairman. The committee has been of inestimable service to the profession in straightening out some of the misunderstandings that exist in connection with the settlement of claims in industrial service, and no matter whether you are having trouble with an indemnity company or an



employer of labor it would be well to place your case before the committee, of which Dr. Crockett is chairman, and permit the committee to straighten the matter out to the satisfaction of all concerned. The committee acts as an arbitrator to a large extent, and it is surprising how easily satisfactory settlements of disputes come about when each case is analyzed on its merits by an outside party, even though composed of medical men, so take your disputes to "Davy" Crockett, the chairman of our arbitration committee.

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A PROFESSOR of philosophy in an eastern college says that a lie is an untruth told perniciously and designed to somebody's hurt. Therefore, when a physician tells a patient he is getting better when the reverse is the fact and the physician knows it, a lie has not been told for the reason that the patient has not been injured. Quoting Saint's Progress, "What we do is not wrong until it is proved wrong by the result." This may seem like peculiar reasoning, and is subject to some question in view of the difference in construction placed upon untruth by different people. In the main, a lie is a question of conscience, insofar as its interpretation is concerned, and some moralists assert that the dictates of conscience must prevail even though it hurts. Some even claim that a lie never is justifiable, but we are inclined to agree with a philosopher who said in defense of a woman's honor there is "a time when a man should lie like a gentleman," and likewise there are times when the physician is justified in telling an untruth for the best interests of his patient, but in doing so he must be very sure of his premises.

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FROM a commercial or pecuniary standpoint success in the practice of medicine does not depend upon education, training, experience and integrity. The best men, in the sense of being best equipped by education and training for the practice of medicine, oftentimes have the smallest practices. This failure to build up a practice may be due to inability to make and keep friends, general repugnance against being a good mixer in church or fraternal organizations, to a bad personality, or to an integrity that refuses to stoop to fee dividing or other practices that bring gain to the unscrupulous. On the other hand, there are physicians who as the result of superior ability coupled with a pleasing personality forge ahead and are the envy of unscrupulous confreres. Generally speaking, personality counts for about fifty percent of success in any profession, but the man who will be best satisfied with the results of his efforts is the one who not only makes every endeavor to add to his fitness for the practice of medicine by increased education, training and experience, but who supplements this by rigid adherence to all the rules of the highest integrity.

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A WELL-EQUIPPED office is a sound investment as proclaimed by a well-known manufacturer of office supplies for physicians, but it would be well for the average physician to take into consideration what his needs are for a well-equipped office. Many physicians will go a long way toward improving conditions if they clean house and put their offices in a fairly sanitary condition. The appearance of cleanliness alone goes a long way toward impressing the patient. In the matter of equipment a physician should aim to possess that which is necessary for conscientious and trustworthy work. This doesn't mean filling the office with a lot of junk and making a grand display of instruments and various more or less useless paraphernalia. More patients complain of untidiness as applied to the physician himself as well as to his office than to the lack of equipment. In the final analysis it is the character of work done that counts, and while a certain amount of equipment is essential, yet an office full of all kinds of expensive apparatus, much of which the physician knows little about, is unnecessary and in a measure is considered by the better class of patients as indicating "grandstanding."

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A CHICAGO broadcasting station is permitting medical quacks to broadcast their wares. Recently we heard over the radio through this Chicago station that all surgeons should be prosecuted for operating on anybody, and that drugs, biological products, and antitoxins of every description are poison the use of which should be suppressed by law. The speaker even took a rap at some of the food manufacturers, and declared that the sale of certain kinds of food should be prohibited, and the reason given was not because the foods are unsanitary or sold under misrepresentation, but the products are not suitable for the human system. In conclusion the speaker said that he invited the world to come to his office and be cured without surgery and without drugs. We were unable to catch the name given by the announcer, or definitely locate his place of business, but we wonder what we are coming to when broadcasting stations will permit quacks and medical pretenders of every description to advertise themselves by radio, and it strikes us that if the government has any control over radio it ought to suppress such abuse of an agency that reaches so many people and can be the means of producing great harm.

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THE great middle class, making up the bulk of practice for the average physician, might be called the installment class. They buy automobiles, pianos, phonographs, radios, clothing, furniture and almost everything on the installment plan. They live beyond their means, mortgage the future, and frequently the creditors pay the penalty. No creditor suffers more than the physician, for he usually is the last one paid, if ever

paid, and must wait until various payments have been made on the luxuries enumerated. Recently a well-known collection agency has suggested the advisability of putting many of the accounts of physicians on the installment paying basis. Many an otherwise worthless account for professional services would be paid eventually, or largely paid, if the recipient of the services could be placed in the position where he could meet the account by regular payments and there was some way of holding him to the payments. The scheme is not altogether without merit, and probably would work to the advantage of all concerned. It also would leave a better taste in the mouths of those patients who seldom if ever pay a physician and go from one physician to another in order to avoid paying any of them.

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THE physicians who drove to the Indianapolis session had abundant opportunity to note the idiotic and senseless manner in which our road commissioners shove traffic off on rotten detours. Much of the inconvenience caused by detours would be unnecessary if our road commissioners cared anything about service to the traveling public. Oftentimes when a bridge is out and a convenient temporary bridge or detour of short length could be maintained at small expense, the commissioners, seemingly forgetful of the convenience of the public, shunt all traffic over a long and rough detour of several miles, to the disgust and dissatisfaction of every person going over that route. A similar condition exists when repairs are being made, for instead of repairing half of the road at a time, when it is really possible to arrange it that way and not divert traffic altogether, the commissioners find it necessary to use a long and oftentimes bad detour that might be avoided. There should be some way of eliminating this tendency to make the traveling public detour when roads are under repair or construction, and with a gasoline tax of three cents, all of which is supposed to go into road making, we certainly can afford a little expense in the interests of the traveling public.

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A WELL-KNOWN lay writer says that the public needs education concerning the irrational and dangerous attitude of chiropractors concerning the treatment of communicable and contagious diseases. He thinks that the chiropractors are a menace to public health, and he bases this opinion upon the knowledge that chiropractors in the main pretend and attempt to treat communicable diseases, but that many lay persons do not know the difference between an illy-trained and uneducated chiropractor and the well-trained and well-educated general physician. The argument is sane and sound, and the solution of the problem is to point out to the public the necessity of having those who care for sick people educated and trained according to present standards required of those

practicing regular medicine. In doing this it is not necessary to resort to personalities or bitter condemnation of any of the pseudo-medical cults. Plain facts, set forth in understandable language, should be sufficient to convince any but the most ignorant layman of the dangers of permitting illy-educated and poorly trained men to practice medicine. Fortunately our medical societies are beginning to realize the necessity of educating the public, and our own Bureau of Publicity of the Indiana State Medical Association is doing a commendable piece of work in that direction. *Hygeia* also is a valuable aid in educating the public and should receive the encouragement of every medical man in the country.

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A CLEVELAND hospital has been accused of mixing babies in the maternity ward so that you cannot tell them apart, and a mother who was told that her baby born in the hospital was a boy discovered later that the baby was a girl. The parents at first refused to accept the child and took the matter into court, where a decision in favor of the hospital was rendered. As a matter of fact there are altogether too many hospitals that have been just a little careless in this matter of shuffling newborn babies about without having them properly tagged and identified so that no mistake could be made in giving each mother her own child. We often have felt that so far as individually concerned we would demand that a newborn child be tattooed before leaving the mother's room in order to be sure of identification if the maternity wards in some hospitals were patronized. It isn't merely a question of satisfying the hospital authorities, but it is a question of satisfying the parents, and some means should be adopted in all maternity hospitals of proving to the entire satisfaction of the parents that they are getting their own child and none other. If this Cleveland mixup results in the uniform adoption of more trustworthy methods for the identification of newborn babies in maternity hospitals it will have served a useful purpose, but any alteration in our present methods of identification should meet the requirements of the parents as well as the hospital authorities, and without the slightest reason for doubt.

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MRS. RITZ CARLTON, out airing her pet police dog or Pomeranian, has incurred the enmity of an editor of a prominent Indiana newspaper who says that provision should be made for a fine when a pet dog musses up the sidewalk or private lawns, or otherwise provision should be made for dog toilets. Well, dog toilets on our public streets are no worse than the public urinals on the avenues of Paris, and we may come to stand for both in this country some time in the future. We have considerable sympathy for the petulant lay editor who voices a protest that is worthy of some consideration, but if he thinks that any of the Indiana



cities are suffering from the dog nuisance he ought to live in any of the cities in France where the morning parade of dogs in any of the fashionable avenues, with all of the objections to which he complains, is a regular feature. Not only this, but there are many restaurants in Parisian cities as well as Italian cities where dogs not only are permitted at the table but have a place set for them and have their food there. At least this latter is something that does not occur in America, so far as we know, and therefore we believe that we have something for which to be thankful. However, the question of providing dog toilets might be one that could be put up to the aldermen of various cities, or perhaps it might be the subject of a bill before the legislature. More idiotic legislation has been considered by our law-making bodies. The discussion of such a subject might help to pave the way for recognition of the worth of the services of our aldermen. There are great possibilities connected with the discussion of such an Utopian idea.

INASMUCH as we have been asked the question, we desire to say that we are in favor of placing all Latin America under the quota prescribed for immigration as applied to other nations. Therefore, if the Boulder Dam is completed and a vast arid acreage is reclaimed, it is quite possible that there will be a great addition to the population through migration and multiplication of Mexican peons who are waiting for an opportunity to stampede the Boulder Dam region when irrigation on a tremendous scale is an accomplished fact. Whether our melting pot will stand such an odd mixture remains to be seen, but we believe that it will not stand unlimited migration of Mexicans to our country. Furthermore, the question of birth rate is a decided factor in the solution of this question. The Anglo Saxon birth rate is low for the reason that the average American woman would rather rear poodle dogs than children. On the other hand the peons multiply like rabbits. Mexican families of ten, twelve and even fourteen living children are common. It requires no mathematician to prove that by the fourth or fifth generation the population of the fertile area represented by millions of acres reclaimed by the Boulder Dam will not only be Mexican, and on a level with Latin America, but the prolific birth record will increase the population a good deal like guinea pigs increase. Therefore, considered from all of the various angles it would seem advisable to limit immigration from Mexico just as it is limited from southeastern Europe. If we do not do this we are going to have the migration of hundreds of thousands of Mexican peons into the United States, and this probably will inject into our national life another serious color problem.

THE old saying, "Competition is the life of trade," applies in most fields of endeavor. If any city has two rival companies furnishing electricity, gas, or any other necessity for either comfort or luxury, the patrons are very apt to obtain good service and reasonable prices, but whenever an enterprise turns into a monopoly, then look out for increased prices and poor service unless the monopoly is carefully regulated by law. Right now our burden of complaint concerns the services rendered by the one express company that has a monopoly upon the business. A few years ago it was possible to have an express package collected with reasonable promptness, and to have an incoming express parcel delivered promptly. It also was the rule to have courteous and accommodating messengers. Today an outgoing express package may be collected at the end of twenty-four hours, and perhaps not for thirty-six or forty-eight hours, or in some instances not at all. An incoming express package may or may not be delivered, and it invariably is handled with that careless, don't-care method so commonly seen where there is no incentive for good service. Discourtesy and lack of decent accommodation does not enter into the heads of the average express employee of today. When we had two to four express companies bidding for our business we had service. Now that we are restricted to one company we have no service and we pay more for the bad service we do have than was ever paid before. If we are to have only one company in the interests of economy, as is usually preached when competition is shut off, then by all means let us have some law to force monopolistic companies to render something tangible for the preference that is bestowed.

ANOTHER one of our pet peeves is to receive trustworthy information to the effect that several of the physicians in northern Indiana and northern Ohio are sending well-to-do patients to the clinics at the University of Michigan because it is possible to obtain services there gratuitously. If those patients paid taxes in Michigan for the support of the University of that state perhaps, as a technical argument, they might be deserving of the free services of the University clinic, but as a matter of fact being residents of either Indiana or Ohio they are not entitled to such consideration. However, aside from all this it is bad enough for well-to-do people to take advantage of free clinics without being encouraged to do so by members of the medical profession. Our free clinics stimulate pauperism and dependency enough as it is without being encouraged by the medical profession. Furthermore, how do these Indiana and Ohio physicians who are sending their patients to the free clinics at the University of Michigan hope to secure anything like decent compensation for themselves when encouraging well-to-do people to obtain something for nothing.



In connection with this free clinic proposition we remember the controversy at one of the sessions of our Indiana State Medical Association concerning the abuse of the University hospitals in Indianapolis. When the matter was investigated and all the circumstances analyzed it was found that most of the blame for the abuses of the University hospitals could be traced to individual members of the medical profession who carelessly, ignorantly, or intentionally aid well-to-do patients to secure the benefit of service intended for the indigent only. Many of the physicians guilty of the practices of which we complain are the ones who are howling the loudest because they are not getting along in the world, and because their compensation is not sufficient to make both ends meet. Is it any wonder?

WE have received numerous letters from Indiana physicians asking us to comment on the editorial by Bernarr Macfadden in the June number of *Physical Culture*. The Macfadden publications, as our readers well know, are exploiting a cult for commercial reasons, and if all reports are true the profits have been enormous. No particular attention would be paid to Macfadden and his preachments if he stuck to legitimate efforts to educate the public, but when he started in to make all sorts of extravagant and false claims concerning the curative value of physical culture, and at the same time attack scientific medicine, he assumed the stand of a dangerous fanatic. His condemnation of vaccines and specifics in the treatment of disease is a direct attack upon scientific facts and the wonderful results accomplished in preventive and curative medicine by educated and well-trained investigators whose findings have received the sanction and approval of unbiased people in every part of the world. Despite all that Macfadden, and those of his ilk who profit by their opposition, has to say, the morbidity and mortality rate has been greatly reduced by the scientific discoveries of medical men, and to mention vaccination for smallpox, typhoid, scarlet fever, diphtheria, tetanus and many other serious diseases that so often end fatally, is to enumerate but few of the accomplishments. Down in his heart Macfadden knows that he is not speaking the truth when he gives no credit to drugs and biological products, for he himself would lose no time in rushing to a physician for the administration of recognized anti-syphilitic remedies if he contracted syphilis, for vaccination if in the region of an epidemic of smallpox, for diphtheria antitoxin if one of his children (if he has any) contracted diphtheria, and in fact for any of the recognized scientific treatments for serious affections. Usually such fellows as Macfadden pay a severe penalty for their outstanding opposition to established facts, and while we do not wish Macfadden any bad luck, yet we would like to see him trust the faith that is in him by exposing

himself to some of the communicable maladies that we know are prevented or cured by scientific methods, and in that manner try to prove to the world that physical culture alone is sufficient to keep him from harm. We dare him to take the chance.

WE hesitate to discredit any published statement or appear skeptical as to the veracity of one who puts forth unusual claims, but we would like to have the members of the regular medical profession in Richmond, Indiana, tell us what they think about the statement of S. Edgar Bond, M.D., of their city, a graduate of the Physio-Medical College of Indiana, in 1904, but with no medical society connections, who in *The Bulletin of the Koch Cancer Foundation*, has the following to say: "During the past two years, in connection with my work in general practice, I have seen over fifty cases of various kinds of malignancy and have treated during that period twenty-six cases from a constitutional standpoint with a new synthetic antitoxin (Koch's cancer remedy), instead of enlisting the aid of surgery, radium, or x-ray and their various modalities, escharotics or fulguration as formerly used. The majority of these fifty cases both treated and not treated were far advanced, usually inoperable, and some almost moribund. The majority of these cases, both treated and not treated, have been referred to me by other physicians, surgeons and specialists. \* \* \* The results and achievement from which I will record a few cases has given me a profound respect for the constitutional cure of cancer causation and a great degree of amazement thus far from responses to this new method of treatment. The point has now arrived where I am fortified with numerous clinically cured cases. Those who have died, with but a single exception, had been helped in a marked but unmistakable manner, and a few in their death, at postmortem, had proved its efficiency upon cancer tissue. \* \* \* To my known medical friends all over the United States and Canada who have known my work in other fields, and those with whom I have worked shoulder to shoulder in attempts at medical advance I lend this endorsement as one of the greatest advancements in my opinion in the cancer field." It is rather exceptional to have one man see over fifty cases of malignancy within two years in the city of Richmond, presuming that all of the physicians of the city are seeing their proportionate share of such cases, as it also is rather unusual to find the man of such wonderful scientific attainments as claimed by Dr. Bond using his talents so satisfactorily in the cure of one of the world's scourges. However, Koch's cancer cure is bolstered up by the recommendation and endorsement of many a man outside of the pale of regular medicine, and generally the opinions from that source will not bear close scrutiny or investigation.



## DEATHS

I. O. BUCHTEL, M.D., of Auburn, died August 18, aged sixty-five years. Dr. Buchtel graduated from the General Medical College, Chicago, in 1890.

V. L. HODGES, M.D., of Marion, died September 5, aged 45 years. Dr. Hodges graduated from the Central College of P. and S., Indianapolis, in 1902.

F. H. HEMPHILL, M.D., of Rensselaer, died September 13, aged fifty-five years. Dr. Hemphill graduated from the Central Medical College of St. Joseph, Missouri, in 1898.

K. C. HERSHEY, M.D., of Carmel, died August 26, aged seventy-one years. Dr. Hershey graduated from the Indiana Medical College, Indianapolis, in 1877. He was a member of the Hamilton County Medical Society, the Indiana State Medical Association and the American Medical Association.

JAMES K. RITTER, M.D., of Seymour, died September 1, aged sixty-three years. Dr. Ritter graduated from the Kentucky School of Medicine, Louisville, in 1893. He was a member of the Jackson County Medical Society, the Indiana State Medical Association and the American Medical Association.

CHARLES P. SCUDDER, M.D., of Washington, died September 16, aged sixty-eight years. Dr. Scudder graduated from the Miami Medical College, Cincinnati, in 1881. He was a member of the Daviess County Medical Society, the Indiana State Medical Association and the American Medical Association.

W. O. GOSSETT, M.D., of Brookston, died September 2 at Albuquerque, New Mexico, where he had gone in the hope of regaining his health. Dr. Gossett graduated from the Medical College of Indiana, Indianapolis, in 1905. He was a member of the White County Medical Society, the Indiana State Medical Association and the American Medical Association.

C. C. MILLS, M.D., of Muncie, died September 8, at a hospital in Indianapolis where he had been for several weeks. Dr. Mills was sixty-six years of age. He graduated from the Medical College of Ohio, Cincinnati, in 1888 and was a member of the Delaware County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

GEORGE W. SPOHN, M.D., of Pasadena, California, for many years a practicing physician of Elkhart, and prominent among Indiana phy-

sicians, died July 23, aged seventy years. Dr. Spohn graduated from the Medical College of Ohio, Cincinnati, in 1887. He was a member of the American Academy of Ophthalmology and Otolaryngology.

CHRISTIAN NEUFARTH, M.D., of Sunman, died August 19 as the result of injuries received in an automobile accident. Dr. Neufarth was sixty-eight years of age. He was a member of the Ripley County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Medical College of Ohio, Cincinnati, in 1883.

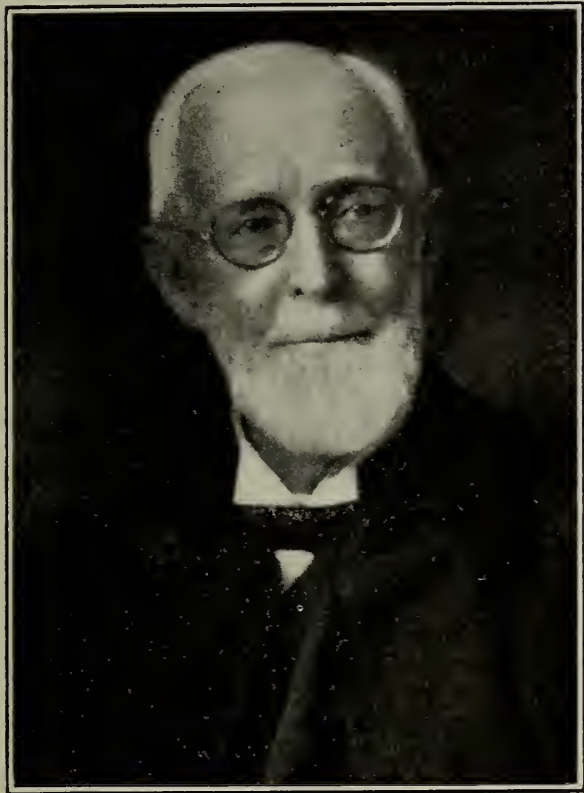
HOMER C. HAAS, M.D., for many years a practicing physician of Peru, died August 17, in Palo Alto, California, where he had gone to live in the hope of regaining his health. Dr. Haas was sixty years of age. He graduated from the General Medical College of Chicago in 1890 and was a member of the Indiana State Medical Association and the American Medical Association.

WILLIAM R. CRAVENS, M.D., died suddenly in his office at Bloomfield, June 4, of cerebral hemorrhage. Dr. Cravens graduated from Indiana University in 1890, from Kentucky School of Medicine, Louisville, in 1892 and from the Central College of P. and S., Indianapolis, in 1896. He was a member of the Greene County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He was fifty-nine years of age.

A. P. BUCHMAN, M.D., who practiced medicine in Fort Wayne for nearly forty years, died September 10, at the home of his daughter in Seattle, Washington, where he had lived for the past twelve years. Dr. Buchman was eighty-two years of age. He was once a member of the faculty of the old Fort Wayne Medical College. He had been retired from the active practice of medicine for many years. Dr. Buchman was a graduate of the Cincinnati College of Medicine and Surgery in 1870.

ORANGE G. PFAFF, M.D., of Indianapolis, died at a hospital in Cleveland, Ohio, August 26, aged seventy years. Dr. Pfaff was a prominent leader among medical men in the state of Indiana. He was a member of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons, the American College of Surgeons, the Indianapolis Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Medical College of Indiana, Indianapolis, in 1882, and was professor of gynecology in the Indiana University School of Medicine, Bloomington-Indianapolis, at the time of his death. Dr. Pfaff was a

past president of the Indianapolis Medical Society and was on the staffs of the Long, City, St. Vincent's and Coleman Hospitals.



GENERAL W. H. KEMPER, M.D., of Muncie, died September 26, aged eighty-seven years. Death followed an attack of influenza. Doctor Kemper, "the grand old man of medicine," was widely known throughout Indiana, and beloved by all who knew him. He had been a resident of Muncie for sixty years. His early life is well described by himself in an article published in the "Indiana Magazine of History" in December, 1923. With the breaking out of the Civil War, he enlisted with Company B of the Seventh Regiment, Indiana Volunteers, and when that term of service was completed he re-enlisted in the Seventeenth Indiana Regiment, where he was made assistant surgeon for the regiment. He served until the expiration of his term in 1864, and following that service he carried on his medical studies in the University of Michigan and in Long Island College Hospital, Brooklyn, from which latter institution he graduated in 1865.

Doctor Kemper was the author of several books, his first one, "The Uses of Suffering," published in 1897, being followed, in 1905, by "World's Anatomists," and, in 1911, by "A Medical History of Indiana." In 1907 he contributed a chapter on the medical profession of Delaware County for the Lewis Publishing Company's "Twentieth Century History of Delaware County." For many years Doctor Kemper was a lecturer on the history of medicine before classes of medical stu-

dents, and he wrote much along that line, the writings including more than fifty articles on medical topics for medical journals and medical societies.

Doctor Kemper served as treasurer of the Indiana State Medical Association from 1879 to 1885, and served as president of the Association in 1887. At the time of his death he was Professor Emeritus of History in the Indiana University School of Medicine. He was a member of the Indiana State Medical Association, and an affiliate member of the American Medical Association.

(See also page 413)

### NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

THE Vermilion County Medical Society held a meeting at Danville, September 6, at the Hotel Wolford. Dr. George Crile, of Cleveland, presented an illustrated lecture.

THE Tippecanoe County Medical Society held its first fall meeting September 8 at the Lafayette Country Club. Dr. George F. Beasley, of Lafayette, presented a paper on "Handling Fractures."

THE Ohio Valley Medical Association will hold its annual meeting at Evansville, November 9 and 10, 1927. Headquarters will be at the Vendome Hotel. Dr. J. F. Wynn, of Evansville, is secretary of the association.

THE Muncie Academy of Medicine held a meeting at the Hotel Delaware, September 23. Dr. George Edwin Baxter, of the Children's Memorial Hospital, Chicago, addressed the meeting, his subject being "Diarrheas in Infants."

THE fifty-sixth annual meeting of the American Public Health Association will be held at the Hotel Gibson, Cincinnati, October 17 to 21. There will be two general sessions, six special sessions, four joint sessions, twenty-two section sessions and eight dinner and luncheon sessions.

DR. ERIC CRULL, of Fort Wayne, has given a silver loving cup to the Indiana Tuberculosis Association to be used as a crusade trophy. The cup will be awarded to the city in Indiana in which the largest number of children, in proportion to school enrollment, do passing work in the health crusade for twelve school weeks.

THE United States Civil Service Commission announces open competitive examination for Junior Medical Officer (Interne), to fill vacancies in Veterans' Bureau hospitals and vacancies in positions requiring similar qualifications. Full



information may be obtained from the United States Civil Service Commission, Washington, D. C.

THE September meeting of the Wabash County Medical Society was held at the Mellow Moon tea room, Wabash, September 15. Hereafter the meetings of this society will be held the first Thursday of each month instead of the third Thursday as has been the custom heretofore. A "question box" supplied the program for the evening.

THE Madison County Medical Society held its regular monthly meeting at Pendleton on September 21. The society was the guest of Dr. W. R. Sparks, president of the society. Honorable Albert Stump, of Indianapolis, addressed the society, his subject being "The Doctor's Relation to the Making of Proper Health Laws and Medical Legislation."

PLANS are being made to hold an American Conference of School Medical Inspectors in Cincinnati, on October 17. The morning session will be held at the Sinton Hotel at 9:30 o'clock. At 6:00 p. m. an informal dinner will be served at the same place, to be followed by short speeches by prominent American School Medical Inspectors. Further information may be obtained from Dr. William A. Howe, State Education Building, Albany, New York.

THE members of the medical societies of Rush, Hancock, Henry and Shelby counties held a meeting at the Blue River Country Club, Shelbyville, September 8. The purpose of the meeting was to plan a medical academy for postgraduate work for the members. At the next meeting a committee will be appointed to organize the academy. Papers were presented by Drs. E. B. Mumford, E. V. Hahn, H. G. Hamer, of Indianapolis, Dr. Cullen Sexton, of Rushville, and Dr. DePrez Inlow, of Shelbyville.

THE Thirteenth District Medical Society held its meeting at the Oliver Hotel, South Bend, October 5. Clinics were held at the Epworth Hospital in the morning, being conducted by Drs. R. L. Sensenich, H. D. Pyle, J. V. Cassady, A. S. Giordano and St. Clair Darden. In the afternoon papers were presented by Drs. A. S. Giordano, Miss Maude Slye of the University of Chicago, and Dr. A. H. Gibson, of Elkhart. Following a banquet at the Oliver Hotel, Dr. R. B. Preble, of Chicago, presented a paper on "Treatment of Cardiac Decompensation."

THE complete program has been published for the international meeting of the Interstate Postgraduate Medical Association of North America associated with the Fall Conference of the Kan-

sas City Southwest Clinical Society. The meeting will be held at Kansas City, October 17 to 22, 1927. General headquarters for all scientific exhibits and sessions will be at the new Ararat Shrine Temple. Hotel headquarters will be at the Hotel Muehlebach. Complete information may be obtained by writing to the managing director, Dr. William B. Peck, Freeport, Illinois.

THE president and board of trustees of the University of Chicago have announced the dedicatory exercises and formal opening of the University clinics and new medical laboratories on Monday, October 31, and Tuesday, November 1, 1927, on the University Quadrangles. A convocation of the visiting delegates and the faculties of the University of Chicago will be held on the morning of October 31. The Albert Merritt Billings Hospital and the Max Epstein Clinic will be dedicated on the morning of November 1. Scientific assemblies, clinics, and demonstrations will be held on both days, and all buildings of the group will be kept open for inspection.

IN addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:

Acetarstone.

Amiodoxyl Benzoate-Abbott.

Ephedrine Sulphate-Abbott.

H. K. Mulford Co.:

Diphtheria Toxin-Antitoxin Mixture, New Formula, Park-Banzhaf's 0.1 L +.

Erysipelas Streptococcus Antitoxin (Concentrated)-Mulford.

Nonproprietary Articles:

Amiodoxyl Benzoate.

THE Twelfth District Medical Society held a meeting at Fort Wayne, September 20. Dr. Frank W. Gregor, of Indianapolis, conducted a skin clinic; Dr. Charles W. Beall, of Fort Wayne, presented a paper on "Chest Tumors"; Dr. L. P. Harshman, of Fort Wayne, presented a paper on "Juvenile Paresis," and Dr. E. R. Carlo, of Fort Wayne, presented a paper on "Vitamins in Infant Feeding." A public meeting was held in the evening which was addressed by Dr. Charles P. Emerson, dean of the Indiana University School of Medicine, Indianapolis. At the business meeting Dr. H. O. Bruggeman, of Fort Wayne, was elected councilor for the Twelfth District Medical Society.

PLANS have been submitted for a reorganization of the American Society for the Control of Cancer. It is proposed to have a council of 100 selected annually instead of the present advisory council;

all state and provincial chairmen would be members of the council. The executive committee would be reduced from twenty members to eight, and the number of directors increased from five to nine, as a result of the financial responsibility resulting from the accumulation of the million-dollar endowment fund. The society would conduct its activities as in the past, with the promotion of clinical facilities for the diagnosis and treatment of cancer, and the establishment of standards for the operation of institutional centers, the education of professional workers and the publication of information regarding the natural history of cancer.

ONE of the most interesting and enthusiastic meetings in connection with the Indianapolis session was the thirtieth anniversary of the 1897 class of the old Medical College of Indiana. Seventeen physicians were present at the reunion luncheon held at the Indianapolis City Hospital, Thursday noon, September 29. The records of the class, as compiled by Dr. W. H. Williams, of Lebanon, who arranged for the meeting, showed that of the 63 graduates of 1897, 10 of the class are dead, 6 are unable to be located, and 47 are practicing medicine today. Of this number the following 17 attended the luncheon meeting: E. F. Tindal, Muncie; H. A. Washburn, Waldron; F. W. Foxworthy, Miami, Fla.; E. M. Conrad, Anderson; M. E. Beckes, Vincennes; J. F. Downing, Muncie; George M. Harper, Springfield, Ill.; O. E. Current, Farmland; Frank H. Green, Rushville; D. A. Wiggins, Newcastle; V. C. Patten, Morristown; T. Holdeman, Elkhart; B. V. Chance, Windfall; S. A. Whitsitt, Madison; Vincent Shephard, Dupont; Luther Williams, Indianapolis; W. H. Williams, Lebanon. Dr. W. H. Williams of Lebanon arranged for the meeting, and the arrangements committee for future meetings follows: W. H. Williams, Lebanon; E. M. Conrad, Anderson; Frank H. Green, Rushville. Of the twenty-eight instructors of the college at that time only seven are living. Dr. Wm. N. Wishard, of Indianapolis, was the only one of the seven present for the reunion.

## SOCIETIES AND INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION INDIANAPOLIS SESSION SEPTEMBER, 1927

#### HOUSE OF DELEGATES

The first meeting of the House of Delegates of the 78th Annual Session of the Indiana State Medical Association was held in a lecture room of the City Hospital, Indianapolis, at three o'clock p. m., September 28, 1927, the president, Dr. Frank W. Cregor, presiding.

Roll-call by Dr. George Miller, of Logansport, chairman of the Credentials Committee, showed 63 delegates present. This being a quorum, the House of Delegates was declared open and ready for business. The president called attention to the fact that in case of amendment of the By-Laws a two-thirds vote of the delegates registered was necessary.

On motion of Dr. George R. Daniels, of Marion, duly seconded, reading of the minutes of the last meeting was dispensed with.

THE PRESIDENT: It is with the keenest pleasure that we welcome a very distinguished guest today. We have with us the secretary of the Michigan State Medical Association. He is also the editor of the *Journal of the Michigan State Medical Association*, and, furthermore, he has been the speaker of the House of Delegates of the American Medical Association for a number of years. We feel honored to have him as our guest, and I take great pleasure in presenting to you Dr. F. C. Warnshuis, of Grand Rapids, Michigan.

DR. F. C. WARNSHUIS: Mr. President, Members of the House of Delegates of the Indiana State Medical Association: That introduction reminds me a good deal of moonshine whiskey—it is all right if you don't swallow it. It is my privilege rather than yours to be present here today, because of that which Indiana is accomplishing in the field of organized medicine in the United States. It has been my privilege to serve as the work horse of the House of Delegates of the American Medical Association, and by virtue of that office I am permitted to sit in the councils of the trustees of that Association, whose members are authorized on every occasion to extend to constituent associations of the American Medical Association the greetings of that body. The Board of Trustees meets four times a year, and we note with considerable interest the place occupied by Indiana in this work of organizing the medical profession. I will not give credit to every individual member of your Association for that activity, because it has been noted that there stand out, as in every state, certain men who have devoted much of their energy and time to this work—such men as Bulson, Wishard and Cregor.

This House of Delegates must assume a bigger and broader obligation than you have in the past. Each one of you represents fifty members of your constituent county societies, and to those men you owe an obligation to take back from the meetings of the next few days an inspiration, a vision of that which organized medicine is attempting to accomplish, and then by securing the support of the fifty men you represent, aid in putting across in your community this wonderful work. The medical profession must be placed before the public in the right manner, and the public must be educated as to the truths of scientific medicine.

This is the greeting I bring to you from the American Medical Association—that you concentrate upon responsibility to your county medical societies, in doing the things which are now opening for us to do; in order that we may achieve that for which the profession stands—the welfare of humanity.

THE PRESIDENT: We get inspiration from such talks as Dr. Warnshuis has given us.

This year, for the first time in the history of the Indiana State Medical Association, we are operating with reference committees. It becomes my duty to announce these committees at this time.

## REFERENCE COMMITTEES

### COMMITTEE ON SECTIONS AND SECTION WORK

Earp (Chairman).....	Marion County
Ball.....	Montgomery County
Steele.....	Kosciusko County
Graessle.....	Jackson County
Totten.....	Jefferson County
Ex-officio Members:	
Jewett V. Reed.....	Marion County
Erdman.....	Marion County
Ehrich.....	Vanderburgh County
Hamer.....	Marion County
Keeney.....	Marion County
Moore.....	Marion County
Gastineau.....	Marion County
Adams.....	Marion County
Reed.....	Tipton County
Ravdin.....	Vanderburgh County



## COMMITTEE ON RULES AND ORDER OF BUSINESS

Stemm (Chairman)	Jennings County
Hosman	Fulton County
Davis	Greene County
Thompson	Wayne-Union Counties
Atkins	Rush County

## COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

Evans (Chairman)	Lake County
Denny	Wayne County
MacDonald	Marion County
Warne	Tipton County
Brubaker	Wabash County

## Ex-officio Members:

Myers	Monroe County
McFadden	Shelby County
Earp	Marion County

## COMMITTEE ON PUBLIC POLICY AND LEGISLATION

Wishard (Chairman)	Marion County
Trent	Delaware County
Pell	Clay County
Daniels	Grant County
Combs	Vigo County

## Ex-officio Members:

Zimmerman	Elkhart County
Fritsch	Vanderburgh County
Scamahorn	Hendricks County

## COMMITTEE ON PUBLICITY

Shanklin (Chairman)	Lake County
Erehart	Huntington County
McAuliffe	Jennings County
Sweet	Morgan County
Colglazier	Orange County

## Ex-officio Members:

Wishard	Marion County
Hadley	Marion County
MacDonald	Marion County

## COMMITTEE ON HYGIENE AND PUBLIC HEALTH

Bulson (Chairman)	Allen County
Johnson	Vanderburgh County
Batman	Monroe County
Hamer	Marion County
Ravenscraft	Noble County

## COMMITTEE ON AMENDMENTS TO THE CONSTITUTION

## AND BY-LAWS

Crockett (Chairman)	Tippecanoe County
Wilson	Posey County
Marshall	Dearborn-Ohio Counties
McKee	Decatur County
Turley	Benton County

## COMMITTEE ON REPORTS OF OFFICERS

Davidson (Chairman)	Vanderburgh County
Brazelton	Gibson County
Oberlin	Lake County
Waters	Henry County
Good	Huntington County

## COMMITTEE ON CREDENTIALS

Miller (Chairman)	Cass County
Carmack	Marion County
Fyfe	Porter County
Reed	Randolph County
Walker	Scott County

## COMMITTEE ON MISCELLANEOUS BUSINESS

Black (Chairman)	Huntington County
Stoltz	St. Joseph County
Leech	Floyd County
Kiser	Marion County
Cameron	Allen County

THE PRESIDENT: The various business that comes before this House of Delegates will be referred to these committees. The man first named is the chairman of the committee. There are ample arrangements for meeting places for these committees, and the committee meetings should be held not later than tomorrow, since the next meeting of the House of Delegates will be Friday morning at seven o'clock, when reports from these committees will be called for.

The various standing committee reports have been published in THE JOURNAL, but each chairman will be given

five minutes to make any explanation he cares to regarding his report, or to make any addition to the report already published.

Report of Executive Secretary: Referred to Committee on Reports of Officers.

Report of Treasurer: Referred to Committee on Reports of Officers.

Report of Chairman of Council: Referred to Committee on Reports of Officers.

## REPORTS OF STANDING COMMITTEES

## Report of Committee on Credentials:

DR. GEORGE MILLER: I have no addition to make to the report, but when you go back to your local societies report that all delegate credentials for next year must be in before the annual session. It is a very important matter who represents you in this Association. If you send credentials in early we will have no trouble.

Report of Executive Committee: Referred to Committee on Reports of Officers.

Committee on Public Policy and Legislation: Referred to Committee on Public Policy and Legislation.

THE PRESIDENT: I would like at this time to give Dr. Shanklin, secretary of the State Board of Medical Registration, an opportunity to make a statement.

DR. E. M. SHANKLIN: A letter, one of a number of similar character, was sent in to the executive secretary's office within the last twenty-four hours, voicing criticism because the State Board of Medical Registration has not as yet issued any licenses to drugless practitioners. That is one of a number of letters of like character that have come to various officials of the State Association, various officials of the State of Indiana, in addition to those that the secretary of the board has received. I believe it is fair to the members of the board, fair to those who have made applications, and it is particularly fair to this House of Delegates to have some first hand information regarding the problems which are before your board, because it is your board.

If I had to use one word to cover the story, I would say it is a matter of finances. Your board has the sum of \$7,000 on which to operate from the 30th day of September one year to the 30th day of September the next year. Out of that we pay a clerk \$2,100. The secretary gets the magnificent salary of \$250 out of the \$7,000; in addition to that we pay the per diem of seven board members, at \$6 per day; we pay the hotel and traveling expenses of seven members of the board. It does not require a mathematician or a logician to understand, then, that this board cannot have meetings very often.

The new medical law took effect on or about May 17 of this year. Since that time, in addition to the duties of the board being doubled by the fact that we have about one thousand drugless applications in our office at the State House, we have prepared questions for the conducting of examinations, and have examined 117 applicants. The preparation of these questions of itself is no small matter. The day has long passed when your board members took up a volume known as "State Board Questions and Answers," made out ten questions on the various subjects, and sent them in. They do not do that any more—if they ever did. It now takes hard labor for from fifteen to thirty days to prepare what we call an intelligent set of questions. This we have had to do since this law took effect. Following that we had to grade the papers of these 117 candidates, in which they answered one hundred questions. That grading I believe is just as conscientiously done by this board as by any other board in the United States. So you see that our routine work has been enough to occupy most of our time and attention since May 17.

To go back to finances—in order that your board might carry on until next Friday, which is the end of our fiscal year, it was necessary for me, as an executive officer of the board, to go to the Governor and ask him for \$1,500 from his contingent fund to carry on the routine work of the board for the rest of the year. In



addition to that, the law has never since its first passage in 1897, provided a single penny for any investigation. Whatever investigation we make of these thousand applicants, and of the schools from which the diplomas originate, is made at the expense of the individual member who makes that investigation. Upon the executive officer of the board—again referring to myself—the burden is placed of investigating these cases. I cannot afford to do it; there is not a man in the room who can afford to do it—to close his office and investigate these so-called schools. Each of the investigations that have been made have been laboriously done. They have been made through correspondence, and it may be that one application will mean the writing of twenty or twenty-five letters by myself. That takes time, whether in my office at Hammond, or in the board office at Indianapolis.

The board is doing the best it can with the job on hand. It has no notion of getting the medical profession in a hole by refusing to issue licenses. We expect to issue licenses just as rapidly as we can get the data before us on which licenses can be issued. We know we will make mistakes, as we have in the past. We made a mistake a few years ago when we issued a license to a boy who was seventeen years and three months old; but we had no way of knowing it. It took us two and a half years to find it out. We will make some mistakes in considering the applications of one thousand persons for drugless licenses; but we want to go as safely and as surely as we can so that we will make the minimum number of mistakes.

I asked the president for this moment for the sole purpose of disabusing the mind of any member of the medical profession in the State of Indiana of the innuendo that has been spread about, in divers places and in divers ways, that the board will refuse to issue licenses.

Dr. Bulson reminds me—but this is old stuff to the members of the House—that no matter what the income of this board may be—and it is around \$10,000 or \$11,000 a year—notwithstanding that fact, not one penny comes from state taxes. And no matter if we get in \$20,000 this year, which we will, we spend no more than \$7,000. When this budget law went into effect three years ago we had a balance of \$6,225.25. That balance under the law reverted to the general fund of the state, and we have nothing—except that the Governor was good enough to give us \$1,500 this summer.

This is your board, and we do not like to be accused of things of which we are not guilty. I would like you also to bear in mind that the two regular school members of this board, Dr. Davidson and myself, have a direct, personal responsibility to this House of Delegates, because when we were appointed eight years ago it was the first time in thirty years that the Governor made the appointment at the recommendation of any body, but Dr. Davidson and I were appointed at the recommendation of the House of Delegates of the Indiana State Medical Association. We are doing our best to get this thing off our hands, and we are not trying to double-cross anyone, either the applicants or the members of the medical profession of the State of Indiana.

#### REPORT OF BUREAU OF PUBLICITY

DR. W. N. WISHARD: I have no special addition to make to the rather long printed report which you will find in *THE JOURNAL*. But we had a request a few days ago from the State Board of Charities, and perhaps from another organization, that we confer with them in reference to various public matters, that they might be called upon as a lay organization—they coming to our offices in the Hume-Mansur building for conferences. But we rather thought that we needed a little more authority than is vested in us to act for the Indiana State Medical Association in connection with matters of public interest that are handled by the State Board of Charities and other state organizations; consequently we have made a supplementary report, which I will not take time to read, the substance of which is a request for your

approval for such cooperation on the part of your Bureau of Publicity.

I may say with reference to the work of this Bureau that it is an active body. It spends the better part of Monday afternoon every week in the office of the executive secretary. We have an enormous amount of correspondence to go over once a week, and we have many requests for speakers to appear before lay organizations. May I take this opportunity to make clear one thing about which there seems to be some doubt in the minds of some of the members of this Association, and that is that in sending out speakers, or giving the approval of the Bureau of Publicity to speakers for lay meetings, we do not do it without the written approval of the president and secretary of the local medical society. We try to cooperate with them—we appeal to them for cooperation, and we are impressed with the splendid work that the medical profession is doing for the communities of our state.

#### SUPPLEMENTARY REPORT OF BUREAU OF PUBLICITY

The work done by the joint committee of the New York State Medical Association and the State Charities Aid Association has come to the attention of your Bureau of Publicity. After studying the report of the New York Committee we recommend that your Bureau be given the authority to act as a special committee to confer with similar committees appointed by voluntary health agents on matters pertaining to the work of these public health organizations and their relation to the medical profession.

Your committee believes this should be done in order that those difficulties that often have arisen between public health agents and the organized medical profession may be avoided, and that a detailed study may be made of the situation as it exists in Indiana.

Respectfully submitted,

WM. N. WISHARD, Chairman,  
MURRAY N. HADLEY,  
F. W. CREGOR,  
J. A. MACDONALD,  
THOMAS A. HENDRICKS, Sec'y.

Report referred to the Committee on Publicity.

#### REPORT OF COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

Referred to Committee on Medical Education and Hospitals.

#### REPORT OF COMMITTEE ON SCIENTIFIC WORK

Referred to Committee on Sections and Section Work.

#### REPORT OF COMMITTEE ON NECROLOGY

Referred to Committee on Public Policy and Legislation.

#### REPORT OF COMMITTEE ON INDUSTRIAL AND CIVIC RELATIONS

DR. F. S. CROCKETT: The work of this committee has dealt largely with cases in which the physician and insurance carriers were not able to agree upon the compensation due the physician. Each year that we have conducted this work, fewer cases come before us. Either we have established a certain plane upon which all these cases are being settled satisfactorily, as a result of our earlier work, or else the thing is being allowed to drop and we are losing the ground we gained a few years ago. We would like to feel that the work has established itself in such a way that the physicians are being paid properly. If this is not the case, the committee should be receiving more of these cases in dispute, and if our methods are poor or inadequate we should be given such information as you may have so that we may handle the matter more effectively.

Report referred to Committee on Public Policy and Legislation.

#### REPORT OF DELEGATES TO A. M. A.

Referred to Committee on Reports of Officers.

#### COMMITTEE ON ARRANGEMENTS

No formal report.



REPORT OF COMMITTEE ON IMMUNIZATION AGAINST  
DIPHTHERIA

Referred to Committee on Medical Education and Hospitals

REPORT OF COMMITTEE ON BUDGET

Report referred to Committee on Reports of Officers.

REPORT OF COMMITTEE ON POSTGRADUATE STUDY

Referred to Committee on Medical Education and Hospitals.

READING OF MEMORIALS AND RESOLUTIONS

Moved by Dr. A. E. Bulson, Jr., that the Chair appoint a committee to draft resolutions concerning the death of Dr. G. W. H. Kemper, which occurred three days ago. Motion seconded and carried. The Chair appointed on this committee: Dr. W. N. Wishard, Dr. A. E. Bulson, Jr., and Dr. W. A. Thompson.

DR. J. W. CARMACK: Two years ago the Indianapolis Medical Society instructed its delegates to present a resolution to this body, but since the State Medical Association was invited here this year this resolution was postponed until this time. I would like to present it now:

WHEREAS: It has become the custom for the local County Society, at the annual meeting place of the Indiana State Medical Association, to provide entertainment for the members and guests of the State Association, and since the entertainment funds must be obtained by individual subscriptions from the members of that County Society, it is obvious that at times this may become an unwarranted hardship upon the hosts of the Indiana State Medical Association; therefore,

BE IT RESOLVED, That the Indiana State Medical Association appropriate from its funds the sum of Five Hundred Dollars (\$500.00) annually for the entertainment of its members and guests, this money to be expended at the direction of the President and Treasurer of the State Association, and the Chairman of the Entertainment Committee, who is appointed annually by the President of the Association. All money in excess of that expended for actual expenses incurred at that Session to revert each year to the treasury of the State Association. Indianapolis, September 28, 1927.

Referred to the Committee on Miscellaneous Business.

Dr. A. J. Hostetler, LaGrange, presented the following resolution:

"I move that the By-Laws of this Association be amended whereby the Indiana State Board of Health may name a delegate to the Indiana State Medical Association, which delegate shall be a physician."

Referred to the Committee on Constitution and By-Laws.

Dr. J. A. Craig asked the secretary to read the following paragraph from the minutes of the second meeting of the House of Delegates at the Muncie meeting in 1922, submitting it for the attention and consideration of the House of Delegates at this time:

"Dr. J. A. Craig, of Greenwood, recommended the appointment of a committee of from three to five, to whom shall be referred the matter of investigating the feasibility of reorganizing the Indiana State Medical Association by increasing the size of the constituent units; such committee to report at the next annual session. Motion seconded by Dr. G. D. Miller, of Logansport, and carried."

Referred to the Committee on Constitution and By-Laws.

UNFINISHED BUSINESS

THE PRESIDENT: I will ask the secretary to read an account of an action that came before the House of Delegates at the last session, and which comes up at this time as unfinished business.

THE SECRETARY: The following action was taken by the House of Delegates in September, 1926:

"The House of Delegates of the Indiana State Medical Association recommends that the physicians of the state acquaint themselves more accurately with the exact procedure of entering patients in the charitable hospitals of the state.

"It is also recommended that they render all assistance possible to the township trustee and to the judge who passes upon these cases.

"It is the spirit of this recommendation to promote the idea that only those patients be entered in the state institution who cannot obtain adequate attention in their own locality.

"Moved by Dr. A. E. Bulson, Jr., that this resolution be adopted. Motion seconded by Dr. H. C. Wadsworth.

"After further discussion it was moved by Dr. C. H. Good that this resolution be tabled for one year. Motion seconded by Dr. Charles Stoltz, and carried."

THE PRESIDENT: I will ask Dr. Bulson, who was chairman of the special Reference Committee at that meeting, to make an explanation of the reason this motion was made.

DR. A. E. BULSON, JR.: You may remember that at the last session of the Indiana State Medical Association a very vigorous complaint was made concerning the admission of patients to some of our state hospitals, notably the Riley Memorial, and it was charged that in some counties the children of parents amply able to pay for medical and surgical attention, and who could have received proper attention at home, were referred to the Riley Memorial Hospital and taken in as indigent patients and given proper attention. This complaint was referred to a committee of which I happened to be chairman, and upon investigation it was found that those very cases which had been referred to the Riley Memorial Hospital had been referred there upon the recommendation of physicians from the county from which these patients came. As a matter of fact, upon investigation and hearing the report from the superintendent of the Riley Memorial Hospital, it was found that absolutely no patient had been admitted either to the Riley Hospital or the Long Hospital who had not been entered in due form and in accordance with the law and the provisions governing the admission of patients. It, therefore, seemed to the committee that the complaint had no foundation and should go back to the county from which it came, though it was thought that the whole subject should undergo some investigation on the part of the physicians of the state, with the idea of correcting some of the evils that may exist. Personally, I do not believe there are any evils existing that can be traced to the hospitals themselves. I believe most of the existing complaints are due to the fault of the physicians themselves.

I personally sanction the reintroduction of the resolution, with a view of encouraging investigation and satisfying all the members of the Association that patients able to pay are not admitted to any state institution for free medical or surgical service.

Voted on the resolution, carried, and the resolution adopted.

THE PRESIDENT: At this time it affords me great pleasure to announce the organization of a new county medical society in the state—that of Harrison county—and I am pleased at this time to present the credentials to the secretary, Dr. William E. Amy.

DR. WILLIAM E. AMY: On behalf of the few physicians in Harrison County I would like to say that this is a reorganization. Some two years ago the state secretary deemed it advisable to cut us out as a small component of the State Association and hook us onto Floyd County. But we found very readily that hawk eggs and hen eggs would not hatch together, so we reapplied for a charter, and it was necessary to thrash it out. We have six physicians who are over 45 and under 50; three over 75, and two over 60, practicing medicine in Harrison County—the largest county so far as mud-holes and mud roads are concerned, in the state of Indiana.



The secretary at this time read a letter from the curator of John Herron Art Institute, Miss Anna Hasselman, inviting the members of the Association to visit the Art Institute during their stay in the city.

The House of Delegates adjourned until Friday morning at seven o'clock.

THOMAS A. HENDRICKS,  
Executive Secretary.

## SECOND MEETING

The second meeting of the House of Delegates, Indianapolis session, September, 1927, was called to order at seven o'clock Friday, September 30, by the President.

Roll-call by Dr. G. D. Miller showed 72 present, and this constituting a quorum the House of Delegates was declared open and ready for business.

Election of officers resulted as follows:

President-elect—Charles E. Gillespie.....Seymour  
Treasurer—William E. Doeppers.....Indianapolis  
Delegates to A. M. A.:

A. E. Bulson, Jr. (2 yrs.).....Fort Wayne  
E. M. Shanklin (2 yrs.).....Hammond  
Alternates:

Donald C. McClelland.....Lafayette  
B. G. Keeney.....Shelbyville

THE PRESIDENT: We will now take up the selection of a place of meeting for next year. We have invitations from three cities.

DR. E. M. SHANKLIN: I would like to ask how many of these cities have presented to the Executive Committee data covering their ability to take care of this convention.

DR. W. R. DAVIDSON: Two are satisfactory; one is doubtful in regard to space.

THE PRESIDENT: The Executive Committee has received official invitations from three different cities, and I think we should now hear from these gentlemen if they care to present their case.

DR. E. M. SHANKLIN: I am not presenting an invitation, but if Lake county is unable to entertain this convention we do not want to extend the invitation. I think what Dr. Davidson has said should have some weight with this body. If any of the cities asking for the convention cannot furnish the necessary accommodations, we ought to know it. I have in mind the plan in use by the House of Delegates of the American Medical Association. All of the invitations are submitted to the Board of Trustees, and any city which cannot prove that it is able to entertain the A. M. A. properly and adequately is not considered. I think we ought to know about the facilities offered. We have gone to considerable trouble to get our data together, and if we have not the proper facilities we do not want to extend the invitation.

THE PRESIDENT: The Constitution and By-Laws provide that the Executive Committee shall investigate the question of the facilities of cities asking for the convention, and as I understand, that is as far as the provision goes. I think the selection of a city rests upon this body here, and I think the order at the present time is the invitations that we are anticipating. We will be glad to hear from anyone now.

DR. E. E. EVANS (Gary): Lake county is the second largest county in point of membership in the state. We have been asked why we did not sooner entertain the Association. We were not prepared. Now we are prepared, and we come with an invitation.

Gary is twenty-one years old, and we now have sufficient accommodations. The invitation we extend is not from the Lake County society alone. Tom now has between thirty and fifty letters from mayors, civic organizations, chambers of commerce, Rotary clubs, and every sort of organization—about fifty invitations, so everybody will cooperate.

All highways entering the city of Chicago from the east and south run through Lake County. We have six steam railroads, and all railroads entering Chicago from the state of Indiana go through Lake County—and

Hammond, our suburb, on the west. We have six inter-urbans bringing passengers from every part of the state. We have 200 passenger trains a day taking on and discharging passengers in Gary, so we can furnish ample transportation.

We have five large hotels—three in Gary, one in Hammond and one in East Chicago. On October 12 we will dedicate the new Hotel Gary, which will cost two million dollars, and is as large as any hotel in Indianapolis. The Lake Hotel, finished last year at a cost of a half million dollars, has ample accommodations, so that within four blocks we can assure you of 1,500 rooms. As to garage space, we can accommodate 1,300 automobiles within six blocks of the Hotel Gary. The meeting places will all be within four blocks at the farthest, perhaps less. The Commercial Club has the entire second floor of the Hotel Gary, and has offered it to us for headquarters. We have one hall that holds 900; a high school auditorium that seats 5,000, and the Hotel Gary has twelve rooms seating 125 to 150 which can be used for section rooms or committee rooms, and some of these rooms can be thrown together. So we can accommodate any group from 125 up to 4,000, all in a space of four blocks. There is a ball room and tea room in this same hotel.

The national association of Elks will meet in Gary next year. We are getting to be a convention city, and we want particularly to entertain this organization. All the cities around are one friendly community and they all join in this invitation. We have 515 acres of park, a million-dollar show house, and the most wonderful beach in the world, possibly excepting Michigan City, and as a peculiarly unique entertainment we have an invitation from the general superintendent of the Illinois Steel Company, that employs 30,000 men, to visit that plant. Usually visitors are not invited, but I asked permission of this superintendent to take the members through, and he said they would take us through on their observation cars. These are the largest steel mills in the world, and you will have an opportunity to see the ore go in in the shape of pigs and come out as the finished steel product.

That does not begin to cover what we have to offer. In fact, Gary can offer you anything but ancient history. We are only twenty-one years old.

DR. F. T. ROMBERGER (Lafayette): I wish to speak in behalf of Tippecanoe County and Lafayette. The data concerning the ability of Lafayette to take care of the Indiana State Medical Association have been furnished to the Executive Committee, and have received its approval.

THE PRESIDENT: As a member of the Executive Committee I wish to say that I do not know that the Executive Committee has approved of any city.

DR. ROMBERGER: I believe Gary can give us a wonderful entertainment, I believe Hammond or East Chicago could do the same, but when you are going to leave Indianapolis and go some place else, why not have the best and come to Lafayette? Lafayette has entertained the State Medical Association before; we can do it again. During the three days we are here Lafayette is entertaining 1,000 Kiwanians, which shows that we can take care of this Association.

It gives me great pleasure to present an invitation from Tippecanoe County to come to Lafayette in 1928.

DR. H. H. MARTIN (LaPorte): I am on my feet to extend to this Association an invitation to hold its next annual session in our County, at Michigan City. Michigan City has been in the game of entertaining conventions for a number of years. It has entertained as high as 5,000 people at one time. That speaks for the ability of Michigan City to entertain the members of this Association next year—or any other year. The ability to get to and from Michigan City is perhaps as ample as that of any other city, with the possible exception of some of these central cities. You all know it is on the lake. It has one building that will house all of the activities of the Association, and at the same time house



all of the exhibits. It is possible, in other words, to confine the activities of this Association under the roof of one building. Around that building there is parking space for at least 4,000 cars within two blocks—that is on the beach of Lake Michigan and in the park.

The Chamber of Commerce of Michigan City will furnish on one day bus transportation from Michigan City to the State Park known as Dunes Park. They will furnish a speaker, and if possible the superintendent of State Parks of Indiana will give an address regarding the development of our State Parks.

So far as the ability of Michigan City to house the members of this Association, I made it known to the Chamber of Commerce that I would not extend this invitation to the members unless they were amply able to provide accommodations in hotels, and they assured me that they could take care of 700 or 800 in hotel rooms, and if you wish to go on the lake for a night or two it is possible to take care of 1,000 to 1,200 there.

Michigan City has everything that is necessary to take care of the convention next year, and the LaPorte County Medical Society extends this invitation through the Chamber of Commerce of Michigan City.

THE PRESIDENT: There are 1,431 registrants for this meeting. This is much larger than at any previous meeting in the history of the Association.

The rule we will follow will be that if any one of these cities receives a majority vote that city will be elected. If there is no majority, the city receiving the smallest number will be dropped, and we will spread another ballot. I will appoint as tellers Dr. Hewitt of Terre Haute, and Dr. Grassle of Seymour.

The selection of place of meeting for 1928 resulted as follows:

Gary .....	60 votes
Michigan City .....	9 votes
Lafayette .....	3 votes

THE PRESIDENT: Gary having received a majority of votes cast, is declared the place of meeting for 1928.

Moved by Dr. Martin that it be made unanimous. Motion seconded and carried.

DR. E. E. EVANS: On behalf of Lake County and especially Gary, I wish to thank the members for their votes, and particularly Dr. Martin for making it unanimous.

DR. A. E. BULSON, JR.: In order that there may be no misunderstanding hereafter, I would like to call attention to the By-Law which provides that the Executive Committee investigate the claims that are put forth by various cities asking for the annual convention and designate the cities that have facilities for caring for our annual convention so that this House of Delegates will have something intelligent to act upon. I move that hereafter the Executive Committee name the inviting cities that meet all of the requirements of this Association.

THE PRESIDENT: The motion is out of order, for the reason that the By-Law specifically instructs the Executive Committee as to its duties. I think it would be a very splendid thing if the By-Laws made provision such as Dr. Bulson suggests, but this is a democratic organization and the things that can rest on this body should rest there. The By-Law does not seem to me to be sufficiently plain to carry out all of the thoughts Dr. Bulson has given us. I think the motion is out of order.

DR. W. R. DAVIDSON: At the meeting yesterday I objected to the committee making definite recommendations to this House, because I do not think it is the thing to do. I do believe, however, that any city desiring to entertain this Association should send in a complete list of the data regarding their ability to take care of the Association, so that the committee could consider it and eliminate the possibility of a jam in the exhibits.

Appropriation has been made for entertainment, but we do depend upon the exhibits. They are more and more a source of income for the Association, and since various firms are showing more inclination to come to our sessions, we, on the other hand, should give them

the benefit of plenty of accommodations in a favorable location for the members to meet these different salesmen. For that reason, I believe that Dr. Bulson intended to say that this information should be in in plenty of time for the committee to make a definite recommendation in case a city were not prepared to take care of the Association. The choice should rest with this House. I do not believe the committee should have the authority to make a definite recommendation of one city to the exclusion of others.

DR. A. E. BULSON, JR.: I rise on the point of personal privilege. I do not want to be understood as meaning that the Executive Committee should make any recommendations except to say to this House whether or not the cities extending invitations can each and all meet the requirements concerning accommodations for this Association. Then the House of Delegates can make a selection from those recommended as being acceptable. This House cannot go through with the routine work of sifting out information as to whether the places can take care of the activities of the Association.

Election of Councilors resulted as follows:

Second District .....	O. Scott, Sullivan
Fifth District .....	Meeting will be held in November
Eighth District .....	M. A. Austin, Marion
Eleventh District .....	Meeting will be held October 20

On motion, duly seconded, Dr. Scott and Dr. Austin were declared elected as Councilors from the Second and Eighth Districts, respectively.

At this time the president presented the president-elect, Dr. Charles E. Gillespie, of Seymour.

DR. CHARLES E. GILLESPIE: I am profoundly grateful for this honor, and while I realize that geography probably played some part in my selection, I hope I shall be in some measure an honor to the position. The fight with the cults is over, and the only fight we have now is among ourselves. I think I will spend most of my energies in promoting harmony in the organization. There is plenty to be done in that field.

#### REPORTS OF REFERENCE COMMITTEES

DR. E. E. EVANS: The Committee on Medical Education and Hospitals approves the report as published and I move its adoption. Motion seconded and carried.

DR. W. N. WISHARD: A meeting of the Reference Committee on Public Policy and Legislation was held at 4:00 p. m. Wednesday, September 28, 1927. All members of the committee were present—Dr. Wishard (chairman), Drs. Trent, Pell, Daniels and Combs; also Drs. Zimmerman and Scamahorn. The report of the standing Committee on Public Policy and Legislation was read and discussed. All members approved of this report. In the discussion it was moved by Dr. Daniels, seconded by Dr. Pell, that the report be approved as printed in THE JOURNAL, and that the chairman of this reference committee shall so report to the next meeting of the House of Delegates. Motion carried unanimously. I move that this report of the reference committee be adopted.

Motion seconded by Dr. Good, and carried.

To the House of Delegates:

Your Committee on Publicity, to which was referred the report of the Bureau of Publicity, submits the following report:

We commend the committee for its very excellent report, as published in THE JOURNAL. We congratulate the committee on the monumental work it has performed in the four years of its existence.

The report of the work of the Bureau, as presented to the Indiana State Health Council, and as later distributed to the county societies and to the secretaries of all state societies, is of the greatest credit to our Association.

The warnings as to the activity of the various "Health Faddists," now so numerous throughout the country, have proven very timely.

The work of the committee in the promotion of periodic health examinations has been productive of much good.



The weekly release of matters pertaining to general health topics is proving ever more popular, and we believe this work to be one of the outstanding accomplishments of the committee.

The financial phase of the report would indicate that the Association is getting a vast amount of general good at the expenditure of a very limited amount of money.

Your committee recommends the adoption of the report, together with the supplemental report.

E. M. SHANKLIN,  
Chairman.

I move the adoption of this report.  
Motion seconded and carried.

#### COMMITTEE ON AMENDMENT OF CONSTITUTION AND BY-LAWS

DR. F. R. CROCKETT: The matters referred to the Committee on Amendment of Constitution and By-Laws were, first, the reorganization of the State Association so as to make larger units than the county as component parts. The committee does not approve of this particular movement, and so reports to this Association.

I move the adoption of this item of the report.  
Motion seconded and carried.

DR. CROCKETT: The second matter was in regard to a resolution, "That the By-Laws of this Association be amended whereby the Indiana State Board of Health may name a delegate to the Indiana State Medical Association, which delegate shall be a physician."

The committee in analyzing this question, which would seem rather simple at first thought, feels that while it has some desirable features, it is susceptible of considerable expansion. There are a number of other related organizations in this state which might properly claim the same sort of relationship and privilege. It was the sense of this committee that a matter of this kind should be given further consideration than the short time allotted here would permit, and we recommend that this matter shall go over in the care of some committee until the next annual session. I move the adoption of this report. Motion seconded.

THE PRESIDENT: I would be glad if the committee had reported something more definite. If it wishes to refer this to some special committee of the Association, I wish they would include that in their report.

DR. A. E. BULSON, JR.: I move that that portion of the committee's report be laid over for one year, the matter to be taken up as unfinished business next year. Motion seconded and carried.

September 30, 1927.

#### *The House of Delegates of the Indiana State Medical Association.*

Gentlemen:

Your committee to which reports of officers were referred recommends adoption of the following:

1. Report of Executive Secretary.
2. Report of Chairman of Council.
3. Report of Committee on Administration and Medical Defense.
4. Report of Delegates to American Medical Association.
5. Report of Committee on Budget.

The committee invites attention in particular to the budget and the treasurer's report. The financial statements of the Association are for the first time placed in form which shows exactly the true condition of the Association's affairs. The Budget Committee very properly shows that there must be a certain time elapse before accurate estimates can be made.

Also, the delegates to the A. M. A. have submitted a succinct report, giving a full resume of the work of the A. M. A. This report is to be commended.

W. R. DAVIDSON,  
C. H. GOOD.

Moved by Dr. Davidson that the report be adopted. Motion seconded and carried.

To the Committee on Miscellaneous Business was referred the following resolution:

WHEREAS, It has become the custom for the local county society, at the annual meeting place of the Indiana State Medical Association, to provide entertainment for the members and guests of the Association, and since the entertainment funds must be obtained by individual subscriptions from the members of that county society, it is obvious that at times this may become an unwarranted hardship upon the hosts of the Indiana State Medical Association; therefore,

BE IT RESOLVED, That the Indiana State Medical Association appropriate from its funds the sum of Five Hundred Dollars (\$500) annually for the entertainment of its members and guests, this money to be expended at the direction of the President and Treasurer of the Association and the chairman of the Entertainment Committee, who is appointed annually by the President of the Association. All money in excess of that expended for actual expenses incurred at that session to revert each year to the treasury of the Association.

J. W. CARMACK.

In committee it was moved, seconded and passed that this resolution be adopted by the House of Delegates.

C. S. BLACK,  
EDGAR F. KISER,  
D. F. CAMERON,  
CHARLES STOLTZ.

Moved by Dr. A. E. Bulson, Jr., that this motion be amended so as to include the name of the executive secretary, he being in close touch with all the arrangements. Motion seconded, and the original motion, as amended, carried.

Moved by Dr. W. R. Davidson that the election of Dr. H. P. Graessle, of the Fourth District, and Dr. H. O. Bruggeman, of the Twelfth District, now in the hands of the secretary, be confirmed. Motion seconded and carried.

#### REPORT OF COMMITTEE ON RESOLUTION REGARDING DR. G. W. H. KEMPER

At the session of the Indiana State Medical Association one year ago, at West Baden, there was present a member of this Association whose life and achievements are inseparably associated with the best traditions of our beloved profession. Dr. G. W. H. Kemper, of Muncie, Indiana, at the time of his death was not only the senior member of the Association, but had been since he united with it one of its leading and most active Fellows, and was a former president.

He was a student, a scholar, a patriot, a Christian gentleman, and a physician skilled in healing. The pages of our annual transactions bear ample testimony to the high character of his contributions to our scientific record.

For the greater part of the eighty-eight years of his life he had been a member and a constant attendant upon our annual sessions. For many years the chairman of the Committee on Necrology, he recorded the biographies of the physicians who had passed on before him. In addition, he was the author of a volume entitled "The History of Medicine in Indiana," and without his careful and capable efforts we would be deprived of much that adds to the credit and renown of medicine in this state. For several years he taught medical history in the old Medical College of Indiana, of which institution he was a trustee.

His patriotism was manifest when as a very young man he enlisted in the Union Army in defense of his country. He already had begun the study of medicine, and after his enlistment he was assigned to the medical department, where he rendered creditable service. As one of the surgeons of the Seventeenth Indiana Regiment his name is recorded on the large monument erected to the memory of Wilder's Brigade on the battle field of Chickamauga.

His interest in his profession dominated his whole life. His genial, kindly greeting at our annual sessions will be missed by all. Few men have left an impress upon the history of medicine in Indiana as has Dr. Kemper.

To our good friend and Fellow of this Association,



to our exemplar of Christian faith and character, to our friend and long-time companion, Hail and Farewell!

WM. N. WISHARD,  
ALBERT E. BULSON, JR.,  
WILL A. THOMPSON.

DR. WISHARD: May I say that it occurs to me at this moment that the very first man who impressed himself upon me when I attended my first meeting of the Indiana State Medical Association in 1874 was Dr. Kemper. He had already made an impression upon the profession in Indiana, and he was the last of a somewhat notable group at that time. He has lingered with us these many years. We all honored him and loved him, and is it not fitting that in tribute to his memory and in respect to a great man, we for one moment rise.

I move the adoption of this report, and that a copy of this resolution be sent to the bereaved family. (Motion carried—by consent.)

DR. A. E. BULSON, JR.: I move that all those who have in any direct way aided in making this session such a wonderful success receive a vote of thanks of this House of Delegates, and I want in particular to mention the following: The City Hospital superintendent and officials: Dr. William Doeppers, City Board of Health officials, Dr. E. E. Padgett, Arthur E. Guedel, Fred E. Jackson, Mr. Mendenhall, and Dr. Herman Morgan.

To the Convention Bureau of the Chamber of Commerce, Henry T. Davis, manager; Mr. Stockley, Mr. Lockridge, and Mrs. Isabel Garland, hostess.

To Indianapolis newspapers for handling the convention, and to the University Hospitals for hospitality.

(Motion seconded and carried.)

DR. A. E. BULSON, JR.: I think we all appreciate the fact that our worthy president has made a splendid presiding officer. He is a parliamentarian, and has ruled in fairness, conducting the activities of this body with firmness. I move that a vote of thanks and appreciation of his services be extended to the outgoing president, Dr. Gregor. (Motion seconded and unanimously carried.)

DR. A. E. BULSON, JR.: I also move a vote of thanks of this House of Delegates to our executive secretary, Tom Hendricks. He is indefatigable in his efforts on behalf of the Association, he is a thorough diplomat—and we all appreciate his services. (Motion seconded and unanimously carried.)

DR. C. H. GOOD: We have an organization in this Association, the Woman's Auxiliary, and it seems to me that this House of Delegates should congratulate Dr. Gregor's wife, the incoming president of that organization, and the ladies who formed this splendid committee for their work this year. I move that a congratulatory message be sent them by our secretary. (Motion seconded and carried.)

DR. W. R. DAVIDSON: I would like to ask the unanimous consent of the House to present a resolution. Dr. Gillespie says the fight on the cults is over. Do not think that for one moment. Right at this time there is a movement on the part of the cults to start a fight in the next Legislature to repeal House Bill No. 39. You heard Dr. Shanklin's report yesterday, representing the State Board of Examination and Medical Registration. I would like to present this motion:

(There being no objection, this resolution was read.)

"WHEREAS, the Board of Medical Registration and Examination is by law directed to enforce the Medical Practice Act; and

"WHEREAS, no money is derived from taxation for its use, but is received from fees of candidates for licensure; and

"WHEREAS, a balance derived from such fees was diverted into the general fund of the state by operation of the Budget Law in 1924 and a limited amount only of current fees is available to the Board; therefore

"BE IT RESOLVED by the House of Delegates of the Indiana State Medical Association that the Committee on Public Policy be directed to present to the Governor and the Budget Committee a request that the Legislature be urged to provide that all money derived from the

fees of candidates for licensure, together with the former balance, be made available for the enforcing of the Medical Practice Act."

I move the adoption of this resolution. (Motion seconded and carried.)

DR. W. R. DAVIDSON: I also would like to ask the unanimous consent of this House to present another resolution. Two members of the Budget Committee told me last year that they never knew that this money came from the fees of candidates; they thought it came from general taxation. During the sessions of the Legislature any number of members made the same statement. They were astonished to find that this Board was supported only by fees derived from candidates. Following the suggestion of Senator Bradford of South Bend, I would like to introduce this resolution.

(There being no objection, the following resolution was read):

"RESOLVED, that the Bureau of Publicity of the Indiana State Medical Association be authorized to disseminate in its weekly release the information that,

"1. The State Board of Medical Registration and Examination is supported by funds derived from physicians.

"2. That it is not supported by taxation.

"3. That it is limited in using funds derived from the fees of candidates for licensure."

The committee felt it would like to have the authorization of the Association, and even then if it seems best that this be not published, if it is not in keeping with the policy of the committee, it will not be done. I move the adoption of this resolution. (Motion seconded and carried.)

THE PRESIDENT: Before we adjourn I wish to thank this House of Delegates again for the honor that has been mine in presiding over you. I thank you sincerely for the earnest efforts you have made in behalf of the Indiana State Medical Association, and for the very kind and sympathetic support that I have had from each and everyone.

No further business appearing, the House of Delegates adjourned *sine die*.

THOS. A. HENDRICKS,  
Executive Secretary.

## THE COUNCIL

INDIANAPOLIS SESSION, SEPTEMBER, 1927  
FIRST MEETING

The Council convened at 12:15 p. m. Wednesday, September 28, 1927, in Parlor "E," Indianapolis Athletic Club, Indianapolis, Indiana, for a luncheon meeting.

The meeting was called to order by the chairman, Dr. Wm. R. Davidson, of Evansville, and the roll call showed the following present: F. W. Gregor, president; George R. Daniels, president-elect; Wm. A. Doeppers, treasurer; A. E. Bulson, Jr., editor of THE JOURNAL; Wm. R. Davidson, Evansville; H. P. Graessle, Seymour; J. H. Weinstein, Terre Haute; E. C. Denny, Milton; E. E. Padgett, Indianapolis; M. A. Austin, Anderson; F. S. Crockett, Terre Haute; E. E. Evans, Gary; C. S. Black, Warren; H. O. Bruggeman, Fort Wayne; H. M. Hall, New Carlisle. Members of the executive committee: A. L. Marshall, Indianapolis; David Ross, Indianapolis; and the executive secretary, Thomas A. Hendricks. Visitors: F. C. Warnshuis, speaker of the House of Delegates of the American Medical Association and secretary-editor of the Michigan State Medical Association.

The minutes of the mid-winter meeting of the Council held Friday, December 17, 1926, at the Indianapolis Athletic Club, Indianapolis, were approved.

Each councilor made a short report of his own district, the outstanding points of which follow:

First District: Reorganization is being planned for Warrick County. Present plan is to consolidate this society with Vanderburgh County.

Second District: No report.

Third District: No report.



Fourth District: Lax attendance reported in several county societies.

Fifth District: Success of post-graduate work cited. With the post-graduate work on in Vigo County the attendance at meetings has increased 50 percent.

Sixth District: Movement on to get Franklin County to unite with Fayette. Shelby County admitted to the very successful tri-county organization of Hancock, Rush and Henry.

Seventh District: Although the Indianapolis Medical Society has the largest number of physicians in its history there are many local physicians remaining who are not members. Mention was made of the Briggs Diploma Mill scandal and the effective work of the newspapers in uncovering this fraud.

Hendricks County has seventeen members and society meetings every three months. There are no ethical practicing physicians in the county who are not members of the society.

Morgan County has twenty-one paid-up members, five or six who are not in the society as they are irregulars.

Johnson County: Twelve ethical practicing physicians of whom ten are members of the society.

Eighth District: "The best district in the state," termed by the Eighth District Councilor. The society does not function as a district due to the fact that the Muncie Academy of Medicine with a strong organization covers the district field, and due to the fact that the district society went in debt several years ago as a result of a failure in attendance to cover a dinner guarantee.

Ninth District: An enthusiastic district feeling in the Ninth District. Membership generally in a good healthy position. Boone is the weak county of the district.

Tenth District: White County is the hard county to take care of in the Tenth District because of its geographical location. Jasper-Newton has good combined county organization. Multiplicity of meetings makes attendance at the district meeting difficult.

Eleventh District: District functioning with good district organization.

Twelfth District: New councilor reports that there will be a revival of the district official organization and plans are now being made for an annual meeting.

Thirteenth District: Good working district society, much interested, is report.

Dr. Gregor moved that the councilors of the Ninth, Tenth, Eleventh and Thirteenth districts hold a meeting and recommend to the Council the disposition of White County. White County adjoins all these districts.

The executive secretary made a preliminary financial report upon the technical exhibits, showing that there were thirty-nine exhibits occupying forty-eight booths. All these were commercial exhibits except the *Hygeia* display.

Thomas N. Overley, manager of the Better Business Bureau, appeared before the Council and gave a very interesting ten-minute talk telling of the work of the Better Business Bureau in checking frauds and dishonest business ventures of all kinds. He spoke particularly of the work done by the Better Business Bureau in checking medical frauds. Following his talk, a letter from Willis S. Thompson, manager of the Extension Division of the Better Business Bureau, was read, inviting the State Medical Association to join. Discussion followed in which Drs. Bulson, Crockett, Graessle, Ross, Marshall and Gregor took part, with the result that many complimentary remarks were made upon the good work of the Bureau. The question arose, however, whether the main work of the Bureau was local in Indianapolis rather than state wide. Following the discussion Dr. Bruggeman made the motion that the Executive Committee of the Indiana State Medical Association be instructed to investigate the invitation to join the Better Business Bureau and prorate the cost among the county societies specially benefited in the state. Upon the motion of Dr. Bulson, Dr. Bruggeman's motion was so amended that the Council approves accepting an invitation to join the Better Business

Bureau and pays the entire expense. Dr. Bulson's motion was then amended by Dr. Daniels. The motion as finally passed provided that the Executive Committee and the executive secretary work out a plan by which the State Association should join the Better Business Bureau provided that it did not cost more than \$250. Motion carried. Report of this committee was to be made at the mid-winter meeting of the Council.

Upon the motion of Dr. Gregor, the chair appointed three members to draft a suitable resolution complimenting the press of Indiana upon the fine way it handled the stories concerning the Briggs' Diploma Mill expose. This committee was made up of E. C. Denny, E. E. Evans and F. S. Crockett, who were instructed to make a report at the next meeting of the Council.

The official credentials for the newly formed Harrison County Medical Society were presented to the Council. The Council authorized the officers of the State Association to make a formal presentation of a charter to the members of the Harrison County Society at the meeting of the House of Delegates which was to follow directly after the Council meeting.

There being no further business the meeting was adjourned.

THOMAS A. HENDRICKS,  
Executive Secretary.

## THE COUNCIL

### SECOND MEETING

INDIANAPOLIS SESSION, SEPTEMBER, 1927

The second meeting of the Council was held directly following the breakfast meeting of the House of Delegates at 9:30 a. m. Friday, September 30, at the Indianapolis City Hospital, Indianapolis.

Dr. Wm. R. Davidson, chairman, presided. The following members were present: First district, Wm. R. Davidson, Evansville; Second District, no representative; Third District, Walter Leach, New Albany; Fourth District, H. P. Graessle, Seymour; Fifth district, Joseph H. Weinstein, Terre Haute; Sixth District, E. C. Denny, Milton; Seventh District, not represented; Eighth District, M. A. Austin, Anderson; Ninth District, F. S. Crockett, Lafayette; Tenth District, E. E. Evans, Gary; Eleventh District, C. S. Black, Warren; Twelfth District, not represented; Thirteenth District, H. M. Hall, New Carlisle. Officers: President, 1927, Frank W. Gregor; president, 1928, George R. Daniels, Marion; president, 1929, C. E. Gillespie, Seymour; treasurer, Wm. A. Doeppers; Albert E. Bulson, Jr., editor of THE JOURNAL; and executive secretary, Thomas A. Hendricks.

Upon the motion of Dr. Bulson the secretary was empowered to send a letter of condolence and flowers in the case of death of any ex-president.

The Committee on Resolutions to newspapers, appointed at the first Council meeting, Drs. Denny, Evans and Crockett, brought in the following report:

"We believe that all persons who would enter the practice of medicine should be possessed of the qualifications as set forth by the state in its medical practice act. We are aware that there are many who would practice medicine who would evade such requirements.

"The Council of the State Medical Association recognizes and approves efforts made to compel all persons practicing medicine to be possessed of proper qualifications. Therefore, be it resolved that the Council of the State Medical Association take this opportunity to express its appreciation of the work done by the Indianapolis *News*, Indianapolis *Star*, Indianapolis *Times*, and the press throughout the state in their efforts to protect the public from fraudulent practitioners."

Dr. Evans, councilor of the Tenth District, made a report in regard to the placement of White County in its proper district.

Dr. Daniels and Dr. Gregor expressed the hope that the State Board of Medical Registration and Examination would license as soon as practicable drugless healers holding diplomas from bonafide schools under the provisions of the new medical practice act amendment.



There being no further business, the meeting was adjourned.

THOMAS A. HENDRICKS,  
Executive Secretary.

### INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

August 1, 1927.

Meeting called to order at 4 o'clock.

Present: Wm. N. Wishard, M.D., chairman; J. A. MacDonald, by proxy, and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held July 25 read and approved.

The following bills were approved for payment:

Wm. P. Walker, mimeograph ink.....\$ 4.00  
Central Press Clipping Service..... 5.00

Total .....\$ 9.00

The final draft of the annual report read and approved.

The release, "Typhoid Fever," read, corrected and approved for release August 8.

Letter received from secretary of the Maine Medical Association saying that the work of the Maine Public Health Association was well worth while and that the annual report could be taken at its face value.

The committee reviewed items which appeared in the Indiana column of the American Medical Association *Journal* and will continue its work of supplying when possible suitable material for this column. The committee approved a vacation for the secretary for two weeks starting August 6.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole Sept. 6, 1927.

WM. N. WISHARD, M.D.,  
Chairman.  
THOS. A. HENDRICKS,  
Secretary.

### BUREAU OF PUBLICITY

September 6, 1927.

Meeting called to order at 4:45 o'clock.

Present: Wm. N. Wishard, M.D., chairman; J. A. MacDonald, by proxy, and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held August 1 were read and approved.

The release, "Preparation of Children for School," was read, corrected and approved for publication Monday, September 12.

Letter received from the Delaware-Blackford County Medical Society in regard to "writings of Dr. Frank McCoy in the Muncie *Evening Press*." Information concerning Dr. McCoy's writings have appeared from time to time in the *Journal of the American Medical Association* and *Hygeia*. Under the title, "The Misinformation of McCoy," *Hygeia* of April, 1927, carried an editorial dealing with this chiropractor who dubs himself "doctor." In the August, 1927, number of *Hygeia*, pages 405-407, an article appeared entitled "More McCoy Misinformation; The Fiction and Fallacies of His Book; The Fast Way to Health by H. W. Hill." The secretary was instructed to obtain clippings from these articles appearing in the Muncie *Press*.

Letter received from the Chairman of the Council suggesting that the Bureau place before the public the facts brought out in the editorial, "Juggling State Funds," which appeared in the August number of THE JOURNAL. The Bureau instructed the secretary to obtain the facts in this case and prepare an article for release to the newspapers which would explain that the State Board of Medical Registration and Examination had the money which it received from physicians taken from it and placed in the general fund.

The following letter was received from the secretary of the West Virginia State Medical Association:

"Charleston, W. Va., Aug. 12, 1927.

"Mr. Thomas A. Hendricks, Executive Secretary,  
"Indiana State Medical Association,  
"Hume-Mansur Building,  
"Indianapolis, Indiana.

"Dear Tom:

"I certainly want to thank you for your kind letter of August 8 in which was enclosed the report of your Bureau of Publicity, together with your handbook for members of the House of Delegates. I not only received all of the information that I wanted on luncheon speakers, but in addition obtained a number of other valuable tips. They will assist me in operating my office.

"I really think your plan of sending out doctors to speak before luncheon clubs is the best one I have come across since relieving Mr. Neale last May. I certainly hope that we can get the idea successfully worked out here in West Virginia.

"Looking forward to seeing you again in Chicago in November, and with every good wish for your state meeting, I am

"Very truly yours,

"JOE W. SAVAGE,  
"Executive Secretary."

Letter received from the secretary of the Hancock County Medical Society in regard to the editorial that appeared in the Greenfield *Daily Reporter*.

The secretary was instructed to write the following letter to the Fugate Company at Indianapolis:

"The Fugate Company,  
"126 South Meridian St.,  
"Indianapolis, Indiana.

"Gentlemen:

"The attention of the Bureau of Publicity of the Indiana State Medical Association has been called to an advertisement, "Prevent Hay Fever Now," appearing in the Indianapolis *News* using a quotation from one of the bulletins issued by the Publicity Bureau of the Indiana State Medical Association. The manner in which this quotation was used in a way implies approval of the booklet on hay fever sent out by the Fugate Company.

"As our articles are intended to be educational and not of a propaganda nature, the Bureau of Publicity of the Indiana State Medical Association has asked me as secretary to write you, respectfully requesting you to discontinue this quotation or any other quotation from our bulletins in your advertisements or letters.

"This letter is being written at the instruction of the Bureau of Publicity of the Indiana State Medical Association.

"Yours very truly,

"THOMAS A. HENDRICKS,  
"Executive Secretary."

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole Sept. 12, 1927.

WM. N. WISHARD, M.D.,  
Chairman.  
THOS. A. HENDRICKS,  
Secretary.

### BUREAU OF PUBLICITY

September 19, 1927.

Meeting called to order at 4:45 o'clock.

Present: Wm. N. Wishard, M.D., chairman; Murray N. Hadley, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held September 6 read, corrected and approved.

Letter read from the field secretary of the American Association for Medical Progress concerning the need "of cultivating locally a more intelligent appreciation of the importance of scientific medicine as an instrument of public welfare."



Articles by "Dr." Frank McCoy appearing in the Muncie *Evening Press* Wednesday, September 7, and Thursday, September 8, 1927, were brought to the notice of the Bureau. The editors of the Muncie *Daily Press* have been informed concerning the standing of McCoy and the facts which investigation by the American Medical Association has brought out against him. These facts are shown in articles which appeared in *Hygeia* under the following heads: "The Misinformation of McCoy," in April number for 1927; and "More McCoy Misinformation, the Fiction and Fallacies of His Book, the Fast Way to Health, by H. W. Hill," August, 1927, *Hygeia*, pages 405-407.

The following letter was received from the executive secretary of the Indiana Tuberculosis Association:

"September 13, 1927.

"Mr. Thomas Hendricks,  
Indiana State Medical Association,  
1004 Hume-Mansur Building,  
Indianapolis, Ind.  
Dear Mr. Hendricks:

"The Indiana Tuberculosis Association, whose primary purpose is to carry on a campaign for the control of tuberculosis, has for some time felt the need of a cooperative working relationship with the Indiana State Medical Association. There are, as you know, many problems common to both groups, and it would be of mutual interest to effect a plan that would permit of a fuller understanding of our activities and bring about a closer union of forces.

"At the last meeting of our Board of Directors, held on July 9, a resolution was passed requesting that this be brought to the attention of the Indiana State Medical Association, with the hope that a committee will be appointed by your body to meet with a similar committee which will then be appointed by this association to meet and devise some plan whereby this desideratum can be accomplished.

"If you will kindly bring this to the attention of the house of Delegates, or whatever group has jurisdiction over such matters, it will be appreciated.

"Very truly yours,

"M. A. AUERBACH,  
"Executive Secretary."

The secretary was instructed to prepare an addition to the formal report which is to come before the House of Delegates at the annual meeting. This report is to contain the recommendation that the Publicity Bureau be ready to meet with committees of the Indiana Tuberculosis Association and various other lay organizations in order to make an intensive and comprehensive study of health activities carried on by these lay organizations and if possible develop a program that will be harmonious both to these lay organizations and to the Indiana State Medical Association.

The following bill was approved for payment:

The Bailey Office Supply.....\$15.00

The release upon the 78th annual meeting of the Indiana State Medical Association read, corrected and approved by the committee.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole Sept. 26, 1927.

WM. N. WISHARD, M.D.,  
Chairman.

THOS. A. HENDRICKS,  
Secretary.

## TRUTH ABOUT MEDICINES

### NEW AND NONOFFICIAL REMEDIES

DIPHtheria TOXIN-ANTITOXIN MIXTURE, New Formula, Park-Banzhaf's 0.1 L + (New and Nonofficial Remedies, 1927, p. 341).—This product is also marketed in packages of one 10 cc. vial, representing three immu-

nizing treatments. H. K. Mulford Co., Philadelphia.—(*Jour. A. M. A.*, August 20, 1927, p. 600).

### PROPAGANDA FOR REFORM

ETHYLENE—II.—The A. M. A. Chemical Laboratory reports another examination of the quality of ethylene for anesthesia which is on the market. The Laboratory reports on the composition of "Ethylene for Anesthesia" of the Certified Laboratory Products (which has been accepted for New and Nonofficial Remedies) and a specimen of the ethylene of the Kansas City Oxygen Gas Company, the quality of which had been questioned in a hospital. The laboratory found both products to meet the requirements of New and Nonofficial Remedies. The Laboratory repeats its previous recommendation, that physicians use only the brands of ethylene described in New and Nonofficial Remedies.—(*Jour. A. M. A.*, August 6, 1927, p. 451).

J. M. HARRIS—QUACK.—James S. Harris, Tulsa, Oklahoma, has for some years been quacking it in the "cancer cure" line, selling "Radium Oil." The Supreme Court of Oklahoma has recently affirmed the judgment of the trial court that had awarded a woman ten thousand dollars damages because Harris had treated what at the outset was an operable case of cancer of the breast and allowed the matter to progress until it became inoperable.—(*Jour. A. M. A.*, August 6, 1927, p. 468).

GRAPEFRUIT INFUSIONS.—The use of a cold water infusion of whole grapefruit (including peel and pulp) seems to be one of the fads of Frank McCoy, who dispenses so much dietetic information that isn't so. According to McCoy, grapefruit "contains organic quinine," which, he declares has "a quicker effect than the inorganic form of quinine used in tablet form." According to McCoy, this infusion of grapefruit is "valuable in its action upon the liver and gallbladder in the elimination of gallstones." Few men have a larger fund of dietetic misinformation than that possessed by Frank McCoy.—(*Jour. A. M. A.*, August 6, 1927, p. 470).

LIVER EXTRACTS IN ANEMIA.—The striking effect of feeding liver and certain preparations of liver on a number of physiological processes has been established. In the case of growing animals, it appears to promote rapid gains in size. The extraordinary effect of diets including liver on severe anemias of long standing in dogs has been shown. Vigorous regeneration of hemoglobin and red blood cells can be brought about by feeding the hepatic tissue of various species, beef, pig, sheep, calf and chicken having been tested with unquestionable success. Striking effects have been obtained in pernicious anemia with diets containing large amounts of liver in one form or another. Studies undertaken to determine the constituents of liver which are effective in pernicious anemia have been made and potent concentrates have been obtained.—(*Jour. A. M. A.*, August 13, 1927, p. 524).

LUCKY TIGER.—This is a dangerous nostrum sold for the treatment of dandruff, eczema and sore feet. Because of reports of severe skin irritation following the use of "Lucky Tiger," the A. M. A. Chemical Laboratory analyzed it. The Laboratory concluded that the preparation consists essentially of ethyl (grain) alcohol. Methyl (wood) alcohol, sodium salicylate and sodium arsenite. The amount of arsenic present as sodium arsenite was about one-tenth as much as found in solution of potassium arsenite (Fowler's solution). When the amount of the preparation that will be used in an application is considered, it can be readily appreciated what a relatively strong solution of arsenic this is. This preparation has no place among legitimate home remedies.—(*Jour. A. M. A.*, August 13, 1927, p. 541).

LUKOSINE NOT ACCEPTABLE FOR N. N. R. \* II.—Since publication of the report of the Council on Pharmacy and Chemistry on Lukosine the National Drug Co. has informed the Council that the quantitative formula for the preparation is given in its price list and in its "revised advertising." The latter contains the following formula: "Boric acid, 80.5 per cent; Alum. 9.2



per cent; Zinc Sulphate dried, 4.0 per cent; Zinc Phenol-sulphate (Phenolsulphonate?), 2.5 per cent; Sodium Salicylate, 2.5 per cent; Phenol, 1.0 per cent, rendered pleasantly aromatic with a blend of Thyme, Peppermint, Eucalyptus and Methyl Salicylate. Each heaping teaspoonful contains 1/75 grain of Hydrastine White Alkaloid." In view of this the Council revises its statement by the omission of the word "semisecret" to read: "Lukosine is unacceptable for N. N. R. because it is a needlessly complex, and therefore irrational, mixture, marketed with a therapeutically suggestive name and with unwarranted therapeutic claims, in such a way as to lead to its indiscriminate and ill-advised use by the public."—(*Jour. A. M. A.*, August 13, 1927, p. 542).

**DIGITALIS.**—It is well known that many cardiac patients who fail to improve with full digitalization owing to some unknown condition, show marked improvement when the same specimen of digitalis is given subsequently. Such cases afford opportunity for attributing extraordinary value to any digitalis preparation that the clinician happens to employ in the second course of treatment.—(*Jour. A. M. A.*, August 13, 1927, p. 543).

**FUMIGATION AND ANTISEPTICS.**—To prevent the spread of contagion, personal cleanliness, mechanical cleansing of contaminated areas and the boiling or burning of articles that are grossly contaminated is much simpler and safer than the use of antiseptics and fumigation. These often do little more than to give a false sense of security and leave a disagreeable odor.—(*Jour. A. M. A.*, August 13, 1927, p. 543).

**HARRELL ASSOCIATED CHEMISTS.**—Harrell Associated Chemists, 322 W. Washington St., Chicago, exploit a mail order cure for rheumatism. As the head of the organization, one J. Randolph Harrell is put forward. In the advertising he is styled "Professor" and advertised as "an authority on physiological chemistry." The facts are, Harrell is unknown to reputable medicine, pharmacy or chemistry.—(*Jour. A. M. A.*, August 20, 1927, p. 637).

**ALPHA-LOBELINE.**—The Council on Pharmacy and Chemistry reports that under the name "Alpha-Lobelin," Ernst Bischoff Co., Inc., markets a solution of the hydrochloride of the alkaloid alpha-lobeline. The product is marketed in ampules stated to contain, respectively, 1/6 grain and 1/20 grain of alpha-lobelin hydrochloride. The product was submitted to the Council with the claim that its use was indicated in "asphyxiations, shocks and poisoning where there is central respiratory depression." The Council's report states that alpha-lobeline has been very extensively advertised with claims that are extravagant, often bordering on the sensational. The evidence as to the value and safety of the product is still so incomplete that the Council has been unable to reach a definite conclusion. The Council calls attention to a circular issued by the American distributors containing a "Partial List of Hospitals using Alpha-Lobelin" and to a paper by Norris and Weiss. To learn something as to the experience of some of these hospitals with the drug, letters were written to twenty-seven of the more prominent of them. While the reports of some of these hospitals are favorable to the use of the drug (although it cannot be said that they are at all conclusive), it is evident that the circular containing this list of hospitals "where the drug is being used" gives an erroneous impression as to the extent of its use and of the results to be expected. The paper by Norris and Weiss and other papers which have been published contain no conclusive evidence regarding the usefulness of alpha-lobeline. Since adequate evidence for the therapeutic usefulness of alpha-lobeline is lacking at the present time, the Council has postponed definite action in regard to the eligibility of the drug for inclusion in New and Nonofficial Remedies.—(*Jour. A. M. A.*, August 27, 1927, p. 693).

**SOME RECENT OBSERVATIONS ON THE FAT SOLUBLE VITAMINS.**—The concentrate of vitamins A and D represented by the nonsaponifiable fraction of cod liver oil is not effective in herbivora unless it is fed dissolved in

oil. These observations have been confirmed in the case of an omnivorous species. This makes one question the advisability of attempting to supply vitamins to man in the form of dry concentrates unless the latter are given in oil or in close proximity to a meal that carries fat. The ready solubility of vitamins A and D in fats made it seem likely that liquid petrolatum would also be a good solvent. Since the latter is not absorbed from the gastro-intestinal tract, and since it has a widespread use as a laxative, it is important to ascertain whether the fat-soluble vitamins in the food are liable to be "diverted" from alimentary absorption by the presence of the nonabsorbable liquid petrolatum solvent. It has been shown that liquid petrolatum may act as a solvent for vitamin A, thereby depleting ingested foods of their supply of this factor. A comparable influence on the antirachitic vitamin has not yet been demonstrated, though it may naturally be expected if liberal amounts of liquid petrolatum are ingested. Attempts have been made to increase the antirachitic potency of cod liver oil by irradiation. The evidence indicates that this is not feasible.—(*Jour. A. M. A.*, August 27, 1927, p. 694).

**REVISING THE PHARMACOPEIA.**—Apparently some misunderstanding as to the exact nature of the United States Pharmacopeia has given opportunity for criticism of the work of the Revision Committee, particularly of the Subcommittees on Scope and Nomenclature. The first edition of the United States Pharmacopeia, published in 1820, expressed the purpose of selecting from among the substances used in medicine those remedies most worthy of medical employment. To anyone at all familiar with the progress of the U. S. Pharmacopeia, it is obvious that it tends more and more to become a scientifically reliable work, to realizing more and more greatly the necessity for established proof of virtue before admission can be granted.—(*Jour. A. M. A.*, August 27, 1927, p. 697).

**HEXOL NOT ACCEPTABLE FOR N. N. R.**—The Council on Pharmacy and Chemistry reports that Hexol (formerly called Maxol) is manufactured by the Sanitary Supply Co. and is a pine oil soap solution stated to have the following composition: Pine oil, 65 per cent; rosin soap, 10 per cent; cocoanut oil soap, 10 per cent; water, 15 per cent. It belongs, therefore, in the class of pine oil disinfectants which were introduced some twenty years ago in the expectation that they would replace the cresol soap solutions such as Liquor Cresolis Compositus. The Council points out that the name of this unoriginal compound is not descriptive of the composition, and is also misleading in that it suggests the product to be an alcohol containing six carbon atoms. The Council reports on the lack of acceptable evidence for the claims that are made for the preparation and calls attention to a government bulletin giving notice to manufacturers of pine oil disinfectants in regard to the evidence which should be obtained before such products are recommended as general disinfectants. The Council found Hexol unacceptable for New and Nonofficial Remedies because it is an unoriginal mixture marketed under a nondescriptive, proprietary name, and because it is marketed under claims that are unwarranted in the light of available evidence.—(*Jour. A. M. A.*, August 27, 1927, p. 711).

## BOOK REVIEWS

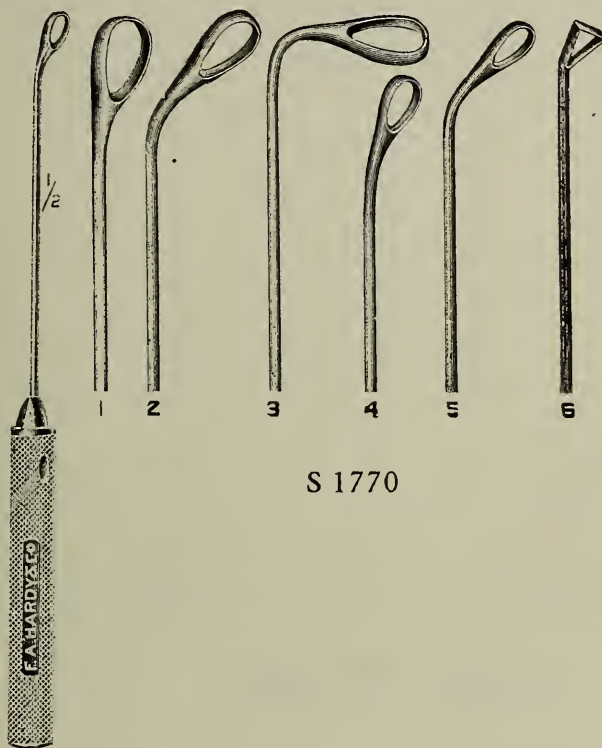
**DISEASES OF THE SKIN AND SYPHILIS.** By Albert Strickler, M. D., Professor of Dermatology and Syphilology, Temple University Department of Medicine; Dermatologist to the Samaritan Hospital; Consulting Dermatologist to the Home for Deaf Children and to the Northeastern Orphan's Home, etc. 218 illustrations. Cloth. Price \$8.00. F. A. Davis Company, Philadelphia, 1927.

A knowledge of skin diseases and syphilis is difficult to acquire, and it is the recognition of this fact that led

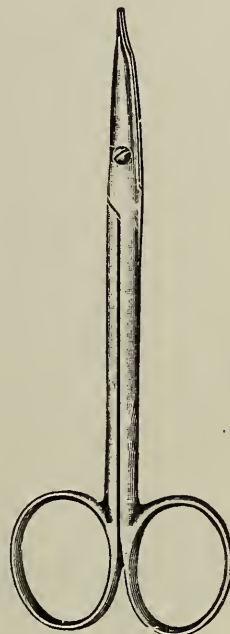
(Continued on adv. page xx)

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S 458NR.



S 2733NR.

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CHICAGO

122 East Washington Street  
FORT WAYNE



## BOOK REVIEWS

(Continued from Page 418)

the author, who long has been a teacher, to write a book on pedagogical principles. He says that little reliance should be placed on memorization of facts and more attention paid to logic. Therefore, the object of this volume is to so present the pathological, clinical and therapeutic facts as to render the clinical clear on the basis of the pathologic, and the therapeutic sound on the basis of the pathologic and clinical. Insofar as possible the etiologic classification of the diseases of the skin has been adopted, as the author has felt that this would serve better than a more or less haphazard grouping of the various dermatologic affections. In consideration of the differential diagnosis of the more important diseases, use is made of the tabular form as the method most advantageous for study and quick reference. He has endeavored to subdivide the facts relating to each disease under the following captions: Eruption, Description, Progress, Distribution, Subjective and Objective Symptoms, Prognosis, Treatment. In the presentation of formulae for local use, the exact purpose of each ingredient is indicated, and there is a commendable feature inasmuch as the average physician occasionally uses preparations that have been recommended by some competent authority but has not known definitely the exact purpose of each ingredient of the prescription used. The author not only recommends the latest trustworthy remedial agents, but takes occasion to evaluate them properly. In the preparation of the book all of the leading authorities have been consulted and due credit given for any opinions expressed. The illustrations are excellent, though we believe that the value of the book would be enhanced by more illustrations in color.

**CITY HEALTH ADMINISTRATION.** By Carl E. McCombs, M. D., National Institute of Public Administration and New York Bureau of Municipal Research. Cloth. Price \$5.50. The Macmillan Company, New York, 1927.

Primarily this book seems to have been written to encourage laymen to take an interest in public welfare, of which the preservation of public health is one of the most important objects of public administration. The author keeps the layman's viewpoint in mind, but discusses in a comprehensive and intelligent way the various health problems with which most municipal communities have to contend. The subject matter is divided into three parts, the first dealing with municipal health function, the second the organization and ministration of sickness preventive functions, and third, the organization and administration of treatment functions. Community health maintenance is discussed under the head of prevention of sickness, and the treatment or cure of sickness in those who cannot adequately provide such care for themselves. It is pointed out that the purpose of government is not to cure sick persons but rather to protect other persons from infections which the sick persons might, if untreated, convey to others. The prevention of sickness has more to do with the modern phase of municipal health work than the cure of sickness. Fortunately there remain few communicable diseases prevalent in this country which cannot be held within bounds by the application of known and proven regulatory measures. However, it requires the constant and unremitting effort on the part of well-trained public health officials to secure the highest efficiency of municipal health service in the field of public welfare. The author, who has had a wide experience in public health work, has discussed all of the various phases of city health administration in a comprehensive manner, and the book ought to be helpful, not only to those who are engaged in similar work as health officers, but to the public which should be interested in community health and its preservation.

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INDIANAPOLIS

# THE JOURNAL

OF THE

## INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

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NUMBER 11

### ORIGINAL ARTICLES

#### INFANT FEEDING—ITS PRESENT STATUS\*

JULIUS H. HESS, M.D.  
CHICAGO

There is no perfect substitute for human milk in the feeding of the infant. All endeavors made to feed an infant on a food not primarily intended for this purpose must be considered as trials at milk adaption. No single diet can possibly meet the needs of all infants.

It must be our object, first, to formulate our rules so as to make them safe and adaptable to the feeding of the majority of well babies. The food recommended will be excessive for some and inadequate for others.

While many excellent results have been reported with the various methods described for artificial feeding of infants, we believe that we must concede that the methods are all more or less empirical, and the result will be in considerable degree dependent upon the wide range of food tolerance of the healthy infant. The successful physician must depend on the clinical observation of the individual infant for the success of the method of feeding which he is using. Every formula with which we start feeding should be looked upon in the light of an experiment, and the reaction of the infant to this feeding should be studied carefully.

I believe that the attempts toward ultra refinement of the infant's diet has led to considerable confusion, because of the different conclusions of the various schools undertaking the work. Eventually, however, infant feeding will be placed on a thoroughly scientific basis. This, however, does not answer the pressing needs of today, which call for a safe and practical solution of the feeding problem for the everyday baby in everyday life.

In advancing the rules for feeding the normal healthy infant on sweet cow's milk dilutions, to which carbohydrates and vitamin rich foods have been added, it is to be emphasized that in clinical experience they have been found safe for the baby

and practical for the physician, which latter is neither to be overlooked nor taken lightly.

The clinical aspects, as represented by the infant's disposition, temperature, weight, stools and hemoglobin, must be given equal consideration with the energy value of the formula. In a consideration of the latter the chemical composition must be considered of equal importance with the caloric value. Otherwise, one meets with profound disturbances due to feeding of insufficient or excessive amounts of the components of the diet, difficult of interpretation. Again, we must not overlook the fact that the constituents of the diet must be in such form as to permit normal digestion and assimilation.

We have spoken of the wide range of tolerance of infants to their foods, and have mentioned that this, in all probability, accounts to a very great degree for the fact that so many men have been successful in the feeding of infants on a variety of mixtures which varied greatly, both quantitatively and qualitatively. There is in all probability another factor which is important in explaining these successes, namely, the fact that to a certain extent fats, carbohydrates, and proteins are interchangeable in their metabolic functions.

If milk dilutions, with the addition of carbohydrates, are used, the simplest and most natural standard would be one which would tell us how much milk, water and carbohydrates per pound or per kilogram body weight the baby should get. To be exact we should express, or at least be aware, of the number of grams of proteins, fats, carbohydrates and salts the infant is receiving for each pound or kilogram of its body weight.

*Milk Required.* To meet protein, fat and salt requirements in feeding with diluted whole milk, the average normal infant will require each day a minimum of 1½ ounces per pound or 100 c.c. per kilo of body weight, exclusive of the sugar and starch which are added in preparation of the mixture.

Experience has taught us that young infants will often require amounts approximating 2 ounces of cow's milk per pound (130 c.c. per kilogram) body weight, except during the first few weeks of life, when smaller quantities of whole or skim milk are indicated. With the institution of a

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mixed diet, the infant thrives with less milk per pound body weight.

In beginning feeding with cow's milk, mixtures must always be started as weak formulae, more often using only 1 ounce of cow's milk to a pound body weight, gradually increasing the strength to meet the infant's needs.

Under-weight infants should at first be fed according to their present weight, gradually increasing the strength of the mixture as rapidly as consistent with the baby's ability to handle the diet, and thus approximating the needs of a full weight baby of the same age. These babies will frequently take over 2 ounces of milk per pound body weight (130 c.c. per kilogram).

The following facts will be of assistance in estimating average, under and overweight in individual infants:

Seven pounds may be taken as an average birth weight. Most normal infants will double this in their first five months and treble it by the end of their first year. Accordingly, infants should gain about five ounces a week during their first five months and should show gains of approximately four ounces a week during the last seven months of their first year.

*Water to Be Added.* The amount of water to be added to the mixture will be governed by the number of feedings and their amount. Young infants will require one-fifth of their body weight in fluids daily, 3 ounces per pound (200 c.c. per kilogram). These amounts may be gradually decreased until in the last months of their first year one-eighth their body weight, 2 ounces per pound (130 c.c. per kilogram) will suffice. Some infants will not be able to assimilate such large quantities in the designated number of meals. In such instances water may be given between feedings to complete their fluid requirements.

*Carbohydrates to Be Added.* Having the necessary amount of milk and water, we ascertain the carbohydrate to be added. Cane sugar answers our requirement for most cases. Milk sugar acts as a laxative in many infants. Unless the laxative effect is desirable it has no advantages. Maltose and dextrin compounds are of practical value when large amounts of cane or milk sugar are not well taken. Because of their varying maltose, dextrin and alkali content, some are constipating and others are laxative. This must be given due consideration in their selection.

The total carbohydrates (sugar contained in the milk, sugar added to the milk, and cereal, if used) should average one-eighth to one-fifth ounce, per pound (from 9 to 13 per kilogram) of body weight a day. One and one-half ounces of milk, averaging 4.5 percent carbohydrate, furnishes  $1/15$  ounce of lactose. Normal full weight infants will usually require a minimum addition of one-tenth ounce of sugar to the milk mixtures for each pound of body weight (6.6 Gm. per kilogram);  $1\frac{1}{2}$  ounces per day fulfills maximum requirements

for most infants. For under-weight infants the amount should be calculated at first on the basis of their present weight, but increased if well taken, to coincide with the amounts indicated for a full-weight infant of similar age.

We do not hesitate to add cereal water to the diet after the infant is one month old, and find it especially valuable in those cases in which we are feeding cane sugar, and in which the infant takes a dislike to its food because of the intense sweetness of the mixture.

*To Break the Curd to Assist Digestion of Cow's Milk.* Many infants can digest raw cow's milk. When not well taken, the tendency to formation of large protein curds is relieved by boiling the milk from two to three minutes over the flame, or, better, by putting it in a double boiler and heating until the water in the outer vessel boils eight minutes. Although the curd is less finely divided by the use of the double boiler, as compared with boiling on the direct flame, it answers the purpose of most infants, and causes fewer changes in the milk. In my own practice all milk feedings are boiled. Orange juice or acidified milks, as lactic acid milk, precipitate with a fine curd.

*Fruit Juice Milks—Milk Acidified with Orange Juice.* Orange juice can be added to cow's milk in amounts of 1 ounce (30 c.c.) to each pint of milk. If the mixture is stirred while the orange juice is being poured in there will be no curdling unless the oranges are exceptionally sour.

It should be emphasized that the amount of orange juice advised to bring about the described chemical changes in the milk, namely, small curd formation, a pH approximating 6.0 and denaturation of the proteins, is one ounce to each pint of milk in the mixture; in other words, a mixture containing one pint of milk and one pint of water would have one ounce of orange juice added. Orange juice milk can be started as early as the second or third week of life. When first added to the infant feeding it should be added in amounts of one-half ounce to the pint of milk. Occasionally an infant who receives the full amount will show some flatulence and looseness of the bowels, more especially when very sour oranges are used. In such cases it may be reduced to one-half ounce to the pint of milk. An ounce of orange juice to the pint of milk may be considered as a maximum addition.

The orange juice milk stools are usually of a light yellow color and more plastic than are seen in infants fed on similar mixtures without the orange juice addition. In our feeding, we prescribe milk which has been heated in a double boiler, exceptions being infants who vomit and those who have a gastric dilatation and in whom small concentrated feedings are indicated. For these the milk is boiled in a single boiler for three or five minutes.

*Egg Yolk Additions.* In addition to fruit juices, yolk of raw egg with its high iron, fat-soluble A and antirachitic vitamin content can be added to advantage. I start with an amount approximating one-eighth of a fresh yolk by the time the infant is three or four weeks of age and increase the amount to a whole yolk by the end of the third month of life. Care should be used in selecting eggs of good quality. Only very exceptionally does an infant show a reaction to the egg yolk. In approximately 1,000 infants fed on this mixture about one in fifty gave evidence of being sensitive to the egg yolk proteins, necessitating withdrawal of the yolk from the mixture.

The orange juice and egg yolk are added after the milk has been boiled and cooled.

They are simply stirred and not beaten into the milk mixture.

This fruit juice and egg yolk mixture contains all of the known vitamins in large amounts, the iron greatly needed by the artificially fed infant and other valuable mineral constituents.

*Lactic Acid Milk.* If milk is first sterilized or pasteurized and then inoculated with a pure culture of the Bulgarian bacillus, streptococcus lacticus or B. acidophilus, a lactic acid milk will be produced which is entirely free from harmful organisms. Bacterial inhibition begins at pH 5.0 and is almost complete at a pH of 4.0. A growth of even the lactic acid producing organisms is inhibited and the acidity does not become much higher, even though incubated for long periods.

Whole lactic acid milk may be prepared by two methods: by the artificial souring of milk by acid-producing organisms, and by the direct addition of lactic acid to sweet milk. Milk artificially soured by lactic acid organisms can be prepared at home. In practice I use milk soured by cultures rather than that made by the addition of U. S. P. lactic acid, when the diet is indicated. Carbohydrates are added in the same amounts as recommended for fresh milk mixtures. Corn syrup may be used instead of sugar, one to one and one-half ounces by measure of the syrup being added to the day's food.

*Dried Cultured Lactic Acid Milks.* Several firms now produce dried lactic acid milks which can be used when freshly prepared cultured milks are not available.

Additional foods from the second to the sixth month. The milk mixtures may be supplemented by the following additions to the diet:

Cereal waters may be used as the diluent beginning with the second month. These are best made from whole cereals, as the dextrinized flours are devitalized.

Orange juice should be begun during the first month, beginning with one teaspoonful, diluted with water, twice daily, and increasing gradually until two ounces are given by the fourth month.

Cod liver oil, phosphorated or plain, should be started before the second month, beginning with

15 drops twice daily, and increasing to one teaspoonful twice daily, by the end of the fourth month—from spoon or dropper.

Cereal gruels (oatmeal, farina, cream of wheat) can be started by the beginning of the fifth month. They should be well cooked. The gruel can be added to one of the midmorning meals and later to the evening meal as well, starting with one-half tablespoonful and increasing gradually until two or three tablespoonfuls is given twice daily.

Additional foods from the sixth month to the end of the first year. A broth and vegetable meal may be gradually substituted for the midday meal at the sixth month. This is best given as a vegetable soup. Feeding should begin with one ounce, gradually increased to eight ounces, one ounce of milk mixture being omitted for each ounce of soup given. If less than a full feeding is given, the meal should be finished with sufficient milk mixture, from a second bottle, to make a full feeding.

Strained vegetables (spinach, carrots, potatoes) may be added in small portions by the eleventh or twelfth months, as a side dish. There is little advantage in so using them before this time, for the vegetables in the soup, when rubbed through a fine sieve, are incorporated in the broth.

Toast or dried bread crumbs may be added to the soup, if desired.

Stewed fruits (apples and prunes) may be fed in small quantities by the end of the first year. So far as their vitamin content is concerned, they are inferior to orange juice.

*Dried Milks.* Of all powdered milk foods the whole, part skimmed and fat free sweet milks and lactic acid milks are the most rational for infant feeding, because they call for reconstruction into formulæ correctly adapted to the individual infant's needs. Dried protein (albumin) milks are in a class by themselves.

Through intensive advertising the manufacturers of dried milks have created a large market for their products. While they have a legitimate place among foods which may be used for infant feeding, there is no indication for their replacing fresh cow's milk of good quality. There is a tendency to give more calories when feeding dried milk than when prescribing fresh cow's milk. Frequently dried milks are given with less modification than is cow's milk, especially with less sugar addition. Results obtained with dried milk are only comparable to those obtained with fresh cow's milk when they are given in the same physiological concentrations. The fat-reduced dried milks are open to the same objections that attend the use of fresh skimmed milk.

There is also the added danger of the infant's passing from under the observation of the physician until grave evidences of nutritional disturbances appear, because of the over-confidence created in the mother's mind that all the infant needs is more of the same limited diet. I wish to convey



the impression that there is such a tendency on the part of the laity when canned products are prescribed, unless mothers are properly warned.

Dried milks are especially useful in the presence of a questionable milk supply, as an early complementary food for nursing infants, and while traveling. In emergencies such as the delivery of spoiled or frozen milk they offer a safe source of food supply.

Because of their soft friable curds and small fat globules they offer a valuable medium when concentrated foods are indicated in anorexia, vomiting and malnutrition, thereby increasing the caloric intake. This can be accomplished either by adding an increased amount of powder to water or by additions of powdered milk to fresh milk formulæ.

They are of value as a complementary or substitute feeding for the breast-fed infant whose stools have a tendency to be loose or frequent; this is particularly true of dried lactic acid milk.

Dried protein milk and lactic acid milk have an especial value as therapeutic diets in diarrheal disorders.

In prolonged feedings with powdered milks; orange juice, cod liver oil or egg yolk must be added to the diet.

In prescribing dried milks the composition of the individual product must be known, as the milks of different manufacturers vary greatly.

*Unsweetened Evaporated Milks.* They are made by heating the milk to 200 degrees F., and then transferring it to vacuum pans, where it is maintained at a temperature of 125 degrees F., until sufficient water is evaporated to bring the product to the required condensation. In most products this milk is about double strength.

The sugar content not being in excess, these milks can be so diluted that a reasonable amount of fat and protein may be obtained, with, however, a considerable deficiency in sugar; this relatively low amount of carbohydrate can then be made up by adding sugar (cane or maltose-dextrin compounds), much the same as is done with cow's milk. Vitamins A and B are probably not injured by the evaporation process, but it is probable that vitamin C is reduced. Orange juice is needed.

Recent experiments by A. F. Hess and Steenbock in irradiation of foods by exposure to ultra violet light have stimulated an almost universal interest on the part of the profession and food manufacturers. We now have positive evidence that both fresh and dried foods can be activated to such an extent as to stimulate healing of rickets, as evidenced by an increased retention of calcium and phosphorus in the blood and changes in the roentgenologic picture.

The degree of permanence with which food products remain active is as yet unknown. It is to be hoped that food manufacturers may be sufficiently conservative in their claims. Conserva-

tism should also be the rule in the substitution of concentrated cod liver oil and irradiated cholesterol products for fresh cod liver oil.

I have recently had an opportunity, while in Leyden, Holland, and Hamburg, Germany, to study the results had from doses of five drops of irradiated cholesterol in olive oil administered three times daily to cases of florid rickets. Bone changes could be demonstrated in the roentgenograms in from eight to twelve days.

#### DIURETICS IN THE TREATMENT OF CARDIO-VASCULAR AND RENAL DISEASE\*

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In discussing before you today the use of diuretics in the treatment of cardio-vascular and renal disease, I have no new investigations to present and much of what I will say perhaps already is familiar to you. However, it has been my experience in seeing patients both in consultation and in the hospital, that their physicians not infrequently have failed to utilize diuretic drugs in such a way as to obtain their optimum effects. These failures lie in the realms of commission, as well as of omission, for there are patients who are harmed by diuretics, equally as there are patients who are benefitted. And so I have thought it might be of practical value to you if I presented the results of my own experience and observations with diuretics in this type of patient. Even though I cover grounds familiar to you, to compare your opinions with mine, as I review the subject, may not be entirely without value.

The aim of diuretic drugs is to increase elimination by way of the kidney. It is over the water content of the urine that we have greatest control in our therapeutic procedures. We have far less control over the elimination of the numerous other constituents of the urine, and this control is largely dependent on and secondary to control over water elimination. All of these constituents are soluble in water, and to a certain extent to increase the amount of water eliminated increases the amount of these several soluble substances which are eliminated in the urine, those of greatest solubility in general showing the greater increase. However, elimination is dependent upon numerous other factors than solubility in water, and in a sense excretion is a selective process.

The important constituents of the urine are present in the circulating blood, as it comes to the kidney, and the kidney's chief function is to remove from this blood a certain proportion of these substances. In addition, under certain conditions there are probably abnormal substances brought to the kidney for elimination. Of these we have

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almost no definite knowledge, but merely theories.

Since, when the kidneys function poorly, certain symptoms result, and since these symptoms do not appear to result from the retention of known constituents of the urine, we assume the presence of unknown, toxic substances. These toxic symptoms we group under the term uremia, and we explain uremia as the result of the retention of abnormal products, which are retained by reason of the defective renal function or possibly are formed as the result of disease. We must admit that this is almost entirely theory, but for the theory a certain amount of evidence can be adduced.

From the point of increasing renal elimination by the use of diuretics we need to consider three groups of substances; (1) water, (2) other known constituents of the urine, both organic and inorganic, and (3) unknown, theoretical, toxic substances. Diuretics as we consider them today are therapeutic agents, and we give them to improve or remove disturbances that result from the abnormal accumulation in the body of some or all of these several substances enumerated in the preceding sentence. We are not concerned with and will not discuss whether or how in a normal individual elimination through the kidney may be increased. There is no therapeutic need of increasing urine flow, unless we desire to remove by way of the kidney something from the body which, if it is retained in the body, exerts a deleterious effect.

The kidney is an exceedingly vascular organ, and since its most important function is that of removing from the blood substances brought to it through the circulation, circulation is doubly important to its proper function; it has a nutritive function and a transport function. A defective circulation through the kidney necessarily causes a deficient renal function. Hence cardio-vascular disease which decreases circulatory activity, indirectly diminishes renal function and leads to undesirable accumulation in the body of substances that should be eliminated by the kidney. To improve renal function under these conditions requires the use of therapeutic agents to improve general and renal circulation. It is in this relationship that diuretics are most effective.

In addition to the rich vascular supply of the kidney, the kidney has a complex arrangement of cells lining the tubules, which in their activity play an important part in renal function, and when these are damaged, renal function suffers. Diuretics may exert an influence to increase cellular activity in the kidney without influencing circulation to any great extent and so improve renal function in this way, but in this relationship diuretics certainly are far less effective than when they act chiefly on the general and renal circulation.

Renal function involves activity of renal structures. If renal structures are already damaged,

to increase renal function increases activity of these renal structures, and this in turn, under certain conditions, by increasing the load of work results in a decrease rather than an increase in excretory activity of the kidney. This sort of an effect is observed frequently after the use of diuretics in patients with nephritis. Urine flow decreases rather than increases after the diuretic. So simple a diuretic as water may have just this effect. Not infrequently I have observed in my clinic that patients with a decreased urine output by reason of some type of nephritis or by reason of cardiac decompensation, when given an increased fluid intake, soon decrease instead of increase their urine output. At times diuretic drugs act in a similar way and not infrequently one observes a decrease in urine flow following an increase which has resulted from giving some diuretic drug. Observations on animals with experimental acute nephritis show the same things. A number of years ago, when, with some of my associates, I was studying experimental nephritis, we found quite regularly that in animals receiving uranium nitrate, which caused an intense degenerative change in renal cells, water or any of the diuretic drugs quite regularly would cause a further decrease in renal function, and in the majority of animals those that received an increased amount of water or were given diuretic or theocin or potassium acetate lived a shorter length of time than those not so treated.

In the preceding paragraphs I have presented briefly the more important things that one needs to have in mind when considering the therapeutic use of diuretics. It is not necessary to dwell longer on this phase of the subject or to attempt to present to you any description of the details of renal activity and the various theories of the mechanism of renal function. Those that are interested in this will find an admirable discussion by Cushny in his book, "The Secretion of the Urine."

Water, retained in the body beyond a certain normal amount, as a rule, is either indicative of defective circulatory or renal activity, or is positively harmful, interfering with the function of organs causing discomfort to the individual. Under the latter circumstances it is desirable to decrease this excess accumulation to a normal amount, and for this purpose we have available certain drugs that increase elimination.

An abnormal accumulation of water either in body cavities or body tissues we call oedema. Oedema may appear because of circulatory inefficiency, so-called cardiac oedema, or because of renal inefficiency, so-called renal oedema, or because of a combination of circulatory and renal inefficiency, so-called cardio-renal oedema. More infrequently other causes lead to oedema and we have oedema of other types; these we will not discuss today. Cardiac oedema is most amenable



to treatment with diuretics and renal œdema is least amenable.

The simplest therapeutic measure for œdema that we know is to reduce the fluid intake; obviously if intake of fluid can be reduced in amount below the quantity of urine excreted, oedema will lessen, but very often such a low fluid intake cannot be maintained without too much discomfort and risk to the patient to justify continuing this procedure. Patients with œdema as a rule have a low urine output, and this would often mean a very small fluid intake to relieve by this means the oedema. One needs to remember, too, that water is a large constituent of some solid foods, and it is one end product of metabolism; in digestion of carbohydrate a considerable amount of water is formed. It is not sufficient merely to estimate the quantity of fluid in the diet as such to determine whether fluid intake is sufficiently less than urine output to remove the oedema, though under usual conditions of practice this suffices.

In some patients merely to limit the ingested fluid to a low level is sufficient to cause a disappearance of œdema, and in all patients with œdema a reduction in fluid intake is a valuable adjunct to treatment. In many patients with cardiac œdema a reduced fluid intake with rest in bed suffices to lead to the removal of the accumulated fluid. In others to these measures should be added digitalis so to improve circulation as to result in the disappearance of œdema. In these patients digitalis has a diuretic action, but digitalis is not a diuretic except when œdema has resulted from cardiac inefficiency.

There remains a group of patients who fail to lose their œdema under the preceding treatment, but if given, in addition to rest, restriction of fluids and digitalis, diuretin, theocin, euphyllin or novasurol, rapidly the œdema is lost. These patients are numerous enough to be of considerable importance in treatment. Many of them have a regular, not very rapid pulse, and there may be no murmurs or other abnormality of heart sounds. In my experience physicians often overlook the cardiac disturbance in these patients and consider them as having renal œdema, because their urine is decreased in amount, and contains much albumin and numerous casts of several kinds. Failing to regard their œdema as primarily circulatory in origin they omit rest and digitalis, possibly do not give one of the diuretics, and so fail of obtaining a brilliant therapeutic result, which would have been attained by the other line of treatment.

The plan to pursue in the treatment of œdema caused by cardio-vascular disease, or cardiac œdema, is to place the patient in bed, restrict fluid intake, using a diet as recently suggested by Smith and his associates (*Jour. Am. Med. Assoc.*, 1927, LXXXVIII, 1943), give digitalis in any of the accepted forms and methods of dosage, and after the patient is nearly digitalized, if the

œdema has not already begun to disappear, give a diuretic drug intermittently. The diet referred to is as follows with fluid intake limited to 1500 c.c. and salt reduced to a minimum for patients with œdema:

TABLE 1

Cardiac Diet, Weighed and Approximated\*

MEALS			LUNCHES		
Breakfast:			9 a. m.:		
Milk	100	½ cup	Water	100	½ cup
Cream	66	¼ cup	or crushed ice	100	1 cup
Cereal (cooked)	120	½ cup			
Sucrose	10	3 teaspoonfuls	10 a. m.:		
Glucose	10	6 teaspoonfuls	Orange juice	150	¾ cup
Dextrin-maltose	10	0	Lemon juice	5	1 teaspoonful
			Sucrose	10	3 teaspoonfuls
Dinner:			Glucose	20	6 teaspoonfuls
Cream	132	½ cup			
Potato	50	¼ cup	3 p. m.:		
Butter	10	2 teaspoonfuls	Milk	100	½ cup
Ice cream	100	½ cup	Cream	66	¼ cup
or junket†		½ cup	Flavoring		
Milk	100	½ cup	Dextrin-maltose	12	4 teaspoonfuls
Water	100	½ cup	Sucrose	5	1 teaspoonful
or crushed ice	100	1 cup			
Supper:			4 p. m.:		
Cream	66	¼ cup	Water	100	½ cup
Milk	100	½ cup	or crushed ice	100	1 cup
Spinach‡	50	¼ cup			
Butter	10	2 teaspoonfuls	7 p. m.:		
Egg	50	1 egg	Milk	150	¾ cup
Cus-tard	100	½ cup	Dextrin-maltose	10	3 teaspoonfuls
Lactose	10	3 teaspoonfuls	or candy		1 stick
Glucose	10	3 teaspoonfuls			

\*The composition of the weighed diet (calculated) is protein, 44 Gm.; carbohydrate, 220.6 Gm.; fat, 109 Gm., and calories, 2,076. Additions to the diet are made between the fourth and the tenth day, beginning with toast, jelly, salt-free crackers, and butter; sieved fruit and baked potato are included later. If the diet is first increased on the fourth day, the patient may be receiving as final additions to the basic diet protein, 3.7 Gm.; carbohydrate, 112.3 Gm.; fat, 25 Gm.; and calories, 718, as follows: breakfast, toast, 20 Gm.; butter, 10 Gm.; jelly, 20 Gm.; dinner, baked potato 1; sieved fruit juice, 100 Gm.; toast, 20 Gm.; butter, 10 Gm.; supper, sieved fruit, 100 Gm.; toast, 20 Gm.; butter, 10 Gm. Stick candy may be substituted anywhere in the diet for the equivalent amount of sugar.

†Milk, 100; cream, 66; sucrose, 5; dextrin-maltose, 10, and a half junket tablet. When junket is served, the milk at 7 p. m. is reduced to 100.

‡Pureed spinach. Other vegetables may be substituted.

This diet seems a more rational one than that usually given to cardiac cases in which fluid restriction mainly is stressed, with a tendency to allow the use of a diet too low in calories to maintain strength. This is particularly true of the Karrel diet.

For many years I have used digitalis almost solely as pills of powdered leaves and found this form so satisfactory as to have but little need to use any other form of the drug. My practice is to give, in case the patient has not previously had digitalis, 0.5 gram (7.5 grains) of powdered digitalis leaves, and to repeat this dose at the end of four hours. Subsequently I give 0.1 or 0.2 gram (1.5 or 3 grains) of powdered digitalis leaves three times a day until some one of Withering's signs of digitalis effect appear. If on the third or fourth day of such treatment, a satisfactory diuresis has not appeared, I give diuretin or theocin or euphyllin in three doses at four-hour intervals, of diuretin 0.5 gram (7.5 grains) per dose, of theocin 0.3 gram (4.5 grains), and of euphyllin 0.1 gram (1.5 grains). Of these, all in all theocin seems the most efficient, though it is true that in any given patient one of these drugs may be effective and the other not. Hence if one fails to obtain a diuresis, one may try another of the drugs

after an interval of 24 hours. Furthermore, theocin in some patients causes marked nausea and for this reason one of the others may be preferable.

Novasurol seems definitely to be a more effective diuretic than any of the preceding, but there are several disadvantages to its use which render it preferable to proceed as above, and reserve the use of novasurol for patients in whom failure results from this treatment. Novasurol has a high content of mercury, 33.9 percent, and so possesses the possibility of all of the discomforts of mercury poisoning, such as stomatitis, ptyalism, diarrhea, colitis, proctitis and nephritis. With the exception of nephritis, all of these are actually common, unless the drug is given cautiously, and even with extreme caution in its use, they may occur. Then in many patients novasurol does not produce a diuresis, unless it is preceded for several days by ammonium chloride, and this involves a time element that does not enter into the use of the other diuretic drugs. However, if diuresis is not obtained by other means, novasurol certainly should be used. It is well to give 1 to 1.5 grams (15 to 25 grains) of ammonium chloride three or four times a day for three to four days. Then give a test dose of 0.5 c.c. of novasurol. This should be given intramuscularly, and if in 24 to 48 hours there are no evidences of mercurialism pointing to an unusual susceptibility to mercury, a regular dose of novasurol, 1.5 to 2 c.c., may be used intramuscularly. I prefer to use the smaller dose, and following the procedure just outlined, uncomfortable after-effects have been extremely infrequent in my patients. I believe at least 48 hours should pass before repeating a therapeutic dose of novasurol. With the majority of patients having cardiac oedema, novasurol, like the other diuretics, should be given after the patient has been digitalized.

Following the above plans of treatment, there are few patients with cardiac oedema in whom a diuresis amounting to several liters cannot be produced. If with the cardiac insufficiency there is combined a well-marked organic lesion of the kidney, diuresis may be slight or absent. If the cardiac condition is too poor to improve under digitalis, diuresis should not be expected. However, it is remarkable how extensive the cardiac damage may be, and yet a diuresis is attainable, and a good diuresis may be obtained over and over again in these patients, even though the oedema cannot be completely or permanently removed. In the same way tests of renal function, such as phthalein excretion or blood urea retention, may point to a badly damaged kidney and still a diuresis results from treatment. In these patients it is the poor renal circulation that has been responsible in large part for the poor renal function, as measured by the tests, and the therapeutic procedures just outlined improve circulation to a degree to restore renal efficiency to a point to make

the kidney capable of excreting a large amount of urine.

In any patient with cardiac oedema the only satisfactory test of cardiac and renal efficiency is the therapeutic one of digitalis followed by one of the diuretic drugs used in a proper manner as just described. Nor does it suffice to try but one of the diuretics, for, as already stated, one may work where others have failed. In refractory patients very large doses of the diuretic are contraindicated because too much of any of them will depress renal function and do just the opposite to what is desired. Continuous use of all is likely to be less effective than a discontinuous use with an interval of 24 to 48 hours between a course of treatment of two to four doses given at intervals of three to four hours.

Caffeine I rarely use as a diuretic because those already enumerated are so much more effective. From time to time I try it when the others fail, but I can recall no instance in which it also did not fail. There are other diuretics, most of them combinations of theophyllin or theobromin with various bases or organic acids or synthetic organic chemicals closely related to them. So far as I know the other diuretics have no real advantages over the four enumerated, and I believe that any physician knowing how to use these four in combination with digitalis is prepared to meet the therapeutic requirements of any patient with cardiac oedema.

One can be optimistic about the treatment of cardiac oedema. As a rule results are very satisfactory, and they justify the time needed by a physician to familiarize himself with the action of these drugs as diuretics in this type of oedema.

When it comes to the question of the treatment of renal oedema, results are far from satisfactory. My experience has been that none of the diuretics are effective except in a rare instance, and that our entire range of methods of treatment, including dietary procedures, fail far more often than they succeed. Furthermore, in these patients diuretics easily may be harmful.

The oedema of acute nephritis usually is not great, and in most cases it clears up spontaneously. It needs no special diuretic treatment, and if any of the diuretic drugs are used, harm is more probable than benefit. In them digitalis will do no harm, but it will do no good.

In subacute or chronic nephritis with oedema the oedema has a curious way of varying spontaneously, and it may disappear entirely, both happening irrespective of treatment. In the majority of patients the last does not happen and all diuretics fail. Rarely a diuresis is caused by a diuretic, and the cautious use of diuretin, theocin or euphyllin in patients with renal oedema is justified. It has always seemed to me that novasurol with its high mercury content is definitely dangerous, and yet with caution I use it, if the others fail; so far, however, I have not observed



beneficial results. Digitalis has no diuretic action when the œdema is due to renal disease, and so digitalis should not be used in these patients.

In a rare patient with chronic renal œdema, the so-called nephrosis patient, a diet rich in protein and low in fat, calcium chloride or lactate, and thyroid extract, if persisted in, will cause a loss of the œdema. I say a rare patient advisedly for in my experience results in these cases have been very unsatisfactory, and even in the occasional case, in which the œdema largely disappeared, it subsequently returned. It happens that the patients I have seen, in which an extensive renal œdema disappeared, all antedate the above treatment and seemed to me to be a spontaneous and not a therapeutic result, occurring with a progressive change in the renal lesion, for these patients continued to have evidences of chronic nephritis. Rightly or wrongly my experience has made me pessimistic about the treatment of œdema of renal origin. The patients that are described as responding so brilliantly to treatment with high protein diet, thyroid, etc., for some reason have steadily avoided my clinic. Last year I thought I had found such a patient, but alas! his progress did not continue, and at no time did he become entirely free of œdema, though he persistently ate his diet and took his thyroid and his calcium chloride in varying doses. Euphyllin gave him his best diuresis, but this soon lost its effect. At present he is more œdematous than he has ever been during the two-year period of his disease, and his urine output is low. Various methods of inducing a diuresis so far have failed to remove his œdema.

In renal œdema, persistent catharsis either with magnesium sulphate or jalap at times seems to help remove the accumulated fluid. At best it is a debilitating form of treatment, and I always wonder whether the patient is not really better off without this sort of treatment. Catharsis for the removal of cardiac œdema seems to me entirely unnecessary, and on the whole injurious. In my cardiac patients I rarely use cathartics as a means for the removal of œdema. Epsom salts long since ceased to be a part of my usual treatment of patients with cardiac disease.

So far discussion has been confined to the elimination of water, and nothing has been said about the elimination of the other known constituents of the urine, organic or inorganic. When water excretion is increased, as a rule there is some increase in the elimination of other urinary constituents, and there may be a considerable outpouring of some of them. However, when there is œdema, there is relatively little storage in the body of the other constituents of the urine, with the exception of sodium chloride, and it is doubtful whether such storage as does take place is in any way injurious. Chloride retention and water retention are closely related, possibly sometimes the one and sometimes the other being the primary

disturbance. When chloride retention is playing a causal role in œdema, a salt poor diet becomes a therapeutic means of decreasing œdema. Such patients, however, are decidedly rare, and so salt retention, as a rule, does not remove œdema.

Patients with marked retention of the nitrogenous substances normally excreted in the urine rarely have œdema, and we can treat them by increasing fluid intake, endeavoring thereby to cause a greater urine flow. Diuretics, other than water, are of little help with these patients, since their kidneys already are badly damaged. Diuretics are apt to increase this damage, and so do actual harm. As already stated, it is not probable that the retention of these known nitrogenous substances cause any particular discomfort, and their removal is not very important in treatment.

When known nitrogenous substances are retained, and at times when they are not, we may have symptoms of uremic type and assume a retention of some theoretical toxic substance as the cause of the symptoms. The elimination of the latter is important, and we attempt to bring this about by giving an increased amount of water to increase urine output, and with this often we combine watery catharsis and sweating. The latter, however, most likely removes very little that is deleterious. Diuretic drugs help very little, if at all, in bringing about an increased elimination of these theoretical toxic substances, because of the kidney damage preventing their effectiveness, and so are scarcely indicated. If given, they may do harm and so great caution is needed in their use. As these toxic substances accumulate in the blood, bleeding is helpful in treatment, but unfortunately often it cannot be used, because these patients as a rule are already anemic as part of their disease. Bleeding followed by transfusion is possible, and occasionally is a worth-while procedure as a means of giving temporary relief from disagreeable toxic symptoms.

Previously I have expressed optimism for the treatment of cardiac œdema. As to the treatment of nitrogenous and toxic retentions of renal insufficiency, as well as of œdema of renal origin, pessimism almost completely takes the place of the optimism in regard to the treatment of cardiac œdema. There are therapeutic measures to try as already described, but not often do they work effectively, and hence the pessimism just expressed. With the disturbances that result from renal insufficiency without œdema a policy of little interference seems the best treatment. The kidney may have a considerable reserve, which can become effective, if the organ is allowed the maximum of rest. Hence, to keep the patient in bed on a simple but adequate diet largely of carbohydrates and low in salt, and to refrain from using diuretics seems the best form of treatment to follow. The amount of fluid to be given must be gauged by the urine output. So long as it increases with increase in fluid intake, a proper fluid amount is

being given; if, with increase in fluid intake, urine excretion falls, one should reduce the fluid intake. With nephritis of any sort a large fluid intake is rarely helpful, and diuretics are often harmful.

Renal disturbances, secondary to prostatic or other form of obstruction, should be treated by removal of the obstruction, and giving a considerable fluid intake so long as the urine excretion is proportionate to fluid intake. In my opinion in this class of renal disturbance diuretics are not to be used, unless there is oedema of cardiac origin. Under the latter circumstances, the treatment, already described for cardiac oedema, should be followed after the mechanical obstruction is relieved. It is to be remembered that in a patient with partial prostatic obstruction to cause a diuresis may result in retention, partial or complete, and so in such patients the physician should observe the patient carefully to detect early any signs of an over-distended bladder, when urine output is increased in the removal of cardiac oedema. If retention back of the obstruction does take place, the obstruction should be relieved at once by means of a retention catheter or other procedure.

From what I have said, it is evident that diuretics are very useful in the treatment of the oedema of cardio-vascular disease, but that they have a far more limited utility in the treatment of renal disease. It is in the latter that their use may do damage and hence they need to be given very cautiously in the presence of renal insufficiency due to renal disease. Consequently to use diuretics intelligently, an accurate diagnosis of both cardio-vascular and renal conditions is necessary, and after they are given, the patients must be observed carefully to avoid doing harm rather than good by giving them.

#### SUMMARY AND CONCLUSIONS

Diuretics, except water, are most effective in the removal of oedema. Oedema of circulatory origin, cardiac oedema, is most influenced by diuretics; oedema of renal origin, renal oedema, is relatively little influenced by diuretics. Our most efficient diuretics are theocin, novasurol, diuretin and euphyllin. Novasurol with its high content of mercury must be used cautiously, especially in the presence of kidney damage, and as a rule needs to be preceded for several days by ammonium chloride.

All of these diuretics, when the oedema is of cardiac origin, work best after digitalis; in these cases digitalis alone may suffice to remove the oedema. When the heart is functioning normally, digitalis is not a diuretic.

When there is retention of nitrogenous substances and the theoretical toxic substances of uremia, water is our best diuretic, and the others have little beneficial action. In these cases with severely damaged kidneys other diuretics than

water often do harm, and sometimes any large amount of water is injurious.

With acute nephritis diuretic drugs should not be used. With chronic nephritis they should be used with caution, for they may do harm.

Diuretics are best given intermittently; the kidney needs a rest period between periods of diuresis.

#### DISCUSSION

C. L. RUDESILL (Indianapolis): I would like to ask Dr. Christian two questions: First, would you advise the use of diuretics in postoperative suppression of urine? Second, in case of cardiovascular and renal disease complicated by pericardial effusion, do you think we can expect much permanent good from the use of diuretics?

DR. CHRISTIAN: In regard to the use of diuretics in postoperative suppression of urine, I am rather of the opinion that they are not very helpful under those circumstances. I give that as an opinion, because I have had very little personal experience with that type of case and I am answering the question on the basis of the observation of some of my colleagues.

In answer to the second question, in cardio-vascular and renal disease diuretics probably do not have very much effect on the pericardial effusion. Pericardial effusion, however, rarely does any harm in itself, and I do not think it makes very much difference whether it is there or not. The exception is chronic pericardial effusion, due to tuberculosis. In those cases you have to tap. I have never seen pericardial effusion in cardiorenal cases where I believed it did enough damage to the circulation to justify tapping, and if the patient improves the pericardial effusion is spontaneously absorbed. I do not think diuretics have very much effect on the effusion apart from their general effect on the patient's condition.

#### PREVENTION IN SOME TYPES OF MENTAL SICKNESS

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When an individual develops typhoid fever we know that it is because he has come in contact with contamination from some source. We also know that individuals develop tuberculosis because they come in contact with the bacillus at a time when bodily resistance is low. When the baby dies of diphtheria it is usually because it did not have antitoxin. Smallpox epidemics are due to lack of proper prevention. All along the line great strides have been made in prevention of disease because we have learned considerable as to the causative factors. Advancement in prevention will probably continue along the line of general medicine, for there is something tangible and definite to work upon. If the symptoms do not help us in discovering the cause, the history will. If neither are definite we can always have



access to the autopsy and to the microscopic and clinical laboratory.

This is not true in mental sickness. The most frequent question asked us, and this question is always embarrassing, is "Why?" "Why is my husband insane?" "Why did my sister lose her mind?" We have seen the case; we have asked the usual questions; we have obtained a complete history, and have had access to the laboratory, and we also have completed a neurological and psychiatric examination. Without much difficulty we have arrived at the diagnosis. The prognosis is not good. Then comes the everlasting question, "Why?"

It is not very satisfactory to enter into any discussion with the friends or relatives as a rule. It is usually better to answer their questions by saying "I don't know."

It is perhaps true that we could answer the question properly if we should say, "Your brother did not go insane. He was always insane and his symptoms have just now become recognized," or we might reply, "Your sister did not lose her mind recently, but we have just discovered that it has been gone for sometime." Such replies, however, would no doubt involve us in difficulties, even though they should be, for the most part, true.

We are, in this paper, speaking only of the common types of insanity; of the manics, the paranoics, the praecoxes and the border-line cases in which definite cause is ruled out. In the paretics we have something definite to work upon. We know nothing definite, as yet, as to the etiology of most types of epilepsy.

It is very discouraging to review the literature as to the cause of mental sickness. There are, of course, many recognized psychoses which have been thought to have been well worked out. These are the so-called symptomatic types. Various investigators, Kraepelin and Bonhoeffer and others, submit long lists of infections with their toxins, but because of our ignorance as to the primary causes, even in the symptomatic psychoses, no satisfactory treatment has, up to this time, been instituted. In this list of infections we find almost all of our old familiar friends: Typhoid, sepsis, rheumatism, malaria, tuberculosis, pneumonia, rabies, influenza, chorea, diphtheria, and in fact, almost every disease or organism of which we have any knowledge. After all is said and done, such a list is of no great importance. After considerable comment, the consensus of opinion is, "treat the original infection if the cause can be located, and hope for the best." As one author says, "In case of fever use an ice cap." An investigator named Weiniche believes that mitral insufficiency produces pathological depression and he also believes that aortic disease causes periods of excitement. This may be true, and if it is true, we might include fracture of

large bones or uncorrected vision as causes of mental symptoms.

In fact, our investigation gets us nowhere. It simply brings us back to the original question, "Why?"

White, in his last text, summarizes the present available information in these words: "I must insist, however, that by far the majority of the symptomatic psychoses fail to exhibit any considerable change microscopically." He further says, "I believe that more room should be given to the consideration of low grade sepsis in the pathogenesis of mental disease."

Why do recognized mental symptoms develop in an individual formerly thought to be sane? We refer now to those forms of insanity which are not due to infection or trauma. We might say, as other do, that alcohol is a large causative and contributing factor, but alcohol is something definite, and we know the changes it produces. Syphilis is also something definite and we should not blame it unless we find it. So we fall back upon the old reliable heredity, which has been used as a cloak for many years and which after all means nothing.

Insanity, epilepsy and congenital mental difficulties, as a rule, run along in families; but again comes the question, "Why?"

Most of us can think of some of our distant aunts or cousins or other kin-folk, who are mentally sick, either at home or in a hospital. Why should it be our aunt or uncle or cousin instead of ourselves?

We may take any type of case that comes up and we sometimes believe, after conferring with the relatives and obtaining all the information that we can, that the family is not quite normal. But we are often unable to put our finger on any definite abnormality, either physical or mental, in any of the relationship. We may say the father is queer, or the mother odd, or one sister peculiar, but most of us have relatives to whom the same term may be rightfully applied.

We shall not endeavor in this paper to differentiate the distinctive symptoms of the various psychoses. It will be sufficient if we group them. The elaborated system of false ideas of the intelligent paranoic, the wild outbursts or the extreme depression of the manic, the foolish smile, the silly laughter or the catatonic condition of the praecox. Were they always so affected, and if so, what barriers have broken to release their mental processes so that they may be recognized as abnormal to those of us who so far have kept our own abnormalities so well covered?

The Greeks were the first to definitely record and diagnose mental diseases, and they were fairly accurate in their descriptions. Hippocrates describes two outstanding types, which he called the maniacal and the melancholic. These terms

are used today and they still carry their oldtime significance.

We do not intend at this time to discuss any treatment, but it is interesting to note some of the methods which the Greeks used. Aurelianus writes very learnedly on the subject. For the excited patient he recommends quiet, subdued light and mild temperature. No pictures on the wall. Air admitted through high openings. Room on ground floor. Bed secured to the floor and so placed that the patient cannot see the door. No visitors. He also advises warm sponge baths and says that arrangements should be made, if possible, for the patient to listen to the sound of falling water. His treatment for the depressed types is also good. In fact, this Greek laid down a good many precepts which are recognized as useful today. His entire treatment program cannot be discussed here, but it covers the ground exhaustively.

To return to our subject, it should be remembered that the most common psychic variation among the mentally sound is an aberrant state of feeling. This applies to all of us. We feel happy or we feel unhappy. We do not always know exactly why. This is not to be considered pathologically. We are so constituted that if we are unhappy and attain something the lack of which we have believed to have been the cause of our unhappiness, we may still be unhappy. If we are glad, we may yet be glad even though troubles arise. This cannot be explained.

We shall try to discover, if possible, any means by which we can prevent the occurrences of mental symptoms in general, and in order to do so, we must get at the cause of some of these symptoms, if it can be done, and we cannot do this without a general understanding of mental symptoms regardless of classifications as to the type of disease.

All psychotics manifest symptoms which are to some extent similar. Each individual form of mental sickness also carries its own symptomatology by which it can be recognized. Let us see, if possible, how many symptoms are common to each form and how many can be applied to all psychoses. This, in other words, will be a sort of reversed differential diagnosis.

Remember now that we are ruling out the symptomatic psychoses. We are ruling out all forms that have been thought to be due to trauma, or to definite infection, or to alcohol, or syphilis. We cannot rule out heredity. It is too vague and indefinite, and although few of us may be tainted by previous generations of alcoholics or syphilitics, and perhaps none of us suffer from any toxin or trauma at this time, sufficient to affect us mentally, we are all of us controlled by our heredity, and we cannot escape its consequences, be they good or bad.

Just a few symptoms now which are to be

found as prominent in all psychoses. Let us first investigate the emotional field. Emotions influence the actions of all of us, but only the psychotic are absolutely and permanently carried away by these emotions. What are the emotions? They are exaggerations of the sensibilities. That is a broad statement and covers a large part of the mental field. A sane man is a sensible man. A man without sense is insane. Exaggerated sensibilities beyond control of the will are mental symptoms. In other words, a psychosis.

A brief review of the cases of mental derangement which form seventy-five per cent of the hospital population brings out the fact that all of these patients are influenced and governed to a great degree by exaggerated sensibilities, or emotions which are beyond control.

A few of the most common emotions may be mentioned; such as fear, for instance. Do we not find that all psychotics are fearful of something at certain times? The excited manic is fearful. So is the epileptic before and after convulsions. So is the praecox and the paranoic. Consider anger. This emotion is practically always seen. All of these psychotics are angry a great part of the time. Other exaggerated sensibilities are found. In fact, these uncontrollable emotions give us a picture in each case, and our diagnosis is sometimes made upon the emotional state present and the mental reaction to that state. Of course, we have a history, and we also have definite neurological findings as well as access to the laboratory, but the psychic picture is what we count upon mostly, and we can have no psychic picture unless the patient reacts. These peculiar ideas, these false ideas, the hallucinations, the delusions and the illusions are traceable to an emotion, a state of feeling, a warped and twisted interpretation of an exaggerated sensibility which manifests itself in the depression, the excitement, the physical outburst, the senseless chattering and the guttural muttering of the insane man or woman. Jealousy is common; joy is seen at times—great and unreasonable joy. Sorrow enters and affects, during various phases, practically all types of psychotics. In some cases it is supreme and overwhelming sorrow, sorrow and sadness to a point of depression bordering upon apathy. Contempt is an emotional state. It is well displayed in the average paranoic and in most praecoxes at times. So on throughout the list of exaggerated sensibilities.

Now consider these emotions as beyond control and associate them in their unrepressed state with the long list of human instincts and it gives us a picture which for the most part represents the average insane man or woman.

An instinct is the propensity in a man which leads to acts which are performed without the exercise of reason. For the most part, and very fortunately so, the instincts produce acts which



are beneficial. The category of instincts in man is long and includes curiosity, acquisitiveness, constructiveness, clannishness and superstition, love of adventure, vanity, modesty, immodesty, love of self and of solitude, and the various desires and attitudes toward sex.

It can readily be seen that the question of etiology in psychoses is becoming more and more complicated. We have gone far enough, however, to feel dissatisfied with the commonly accepted statement that one loses his reason because there was "something wrong somewhere." Almost every student of mental diseases will explain the situation as he has had it explained to him, and will appear satisfied with the vague term "heredity" and believe that it is all and sufficient. Even granted that there is an inherited weakness in the mental and nervous mechanism we should be able to more accurately locate that weakness and explain it. We cannot tell the layman that his brother or sister inherited insanity. He hesitates to believe it. We feel sure in some cases that the statement is true, but somehow we are unable to prove it.

It is possible for any individual who is normal, and who has always been so considered, to become mentally deranged suddenly, or as a rule, gradually. It might happen to any of us. There are thousands of psychotics whose family history reveals absolutely nothing tangible, unless we use our imagination overtime. The so-called normal man or woman, through stress or unusual combination of circumstances, may become depressed, moody, apathetic, fearful, excited, maniacal, homicidal, hallucinated and dangerous. He may absolutely lose control of all or any of his emotions, and this loss may be permanent. He may perform instinctive acts which are harmful. We may say that such emotions have heretofore been controlled, and we may say that such perverse instincts have never before been carried out. It is evident, however, that these abnormalities, if they are so considered, have come to the surface and to a sufficient degree to cause a type of behavior which is called insanity.

Now, let us return for a moment to some of the symptomatic psychoses. Let us see what the authorities have to say regarding the damage done by the infections. It may give us a step forward. We have mentioned a long list of infections and we could add to it. We have been told that in each case where the toxic agent can be treated, that we should direct our treatment towards this toxic agent. We have learned further that the findings in the mental and nervous structures, where toxicity has been thought to have produced psychosis, are so meagre that treatment is not satisfactory.

One authority believes that there is some definite third etiological factor interposed between the somatic disease assumed as the cause and the

mental sickness attributed thereto. We may safely say, I believe, that even though we suspect a definite infection as the causative factor, we find no other pathology, either clinical or microscopical, in the psychotic case that we do not find in the same infection in the normal person.

Let us go on another step. There is an old theory rather commonly accepted and rather prone to faulty interpretation, which we know as the James-Lange theory. There are other similar theories. The content of such theories is to the effect that all bodily sensations go hand in hand with the emotions and the James-Lange idea goes so far as to state that such sensations as the changes in respiration, circulation and alimentation, also the dermal sensations, chills, shivers, and so forth, are the essential nature of the emotions with which they travel, and, in fact, are part and parcel of such emotions. The emotions do not produce any definite behavior. As a rule, the reaction is too sudden. In the psychotic the reaction is not always the normal one, due to the loss of will and to instincts which cause harmful actions. We know that in ourselves the emotions may lead to changes in heart action, changes in respiration, nausea, trembling, etc. Our behavior becomes indefinite and uncertain. Attention changes rapidly from one to another aspect of the situation and we become confused. The desire to act, the pent up energy demanding release in action, seeks channels which were used in the early history of the race, and thus the nausea, the trembling and the bodily sensations. Due to our progress through long periods of time, the channels which were once used are now closed. We become irresponsible. If something can be done, if we can act at once, the sensation ceases, for the cause of it has passed with whatever action is taken.

The psychotic cannot act. He cannot behave as we do. The sensation, however, continues and it is beyond control. Is it then surprising that his actions are exaggerated, that his shivering is increased to all types of bodily movements, that his heart and respiration are accelerated, that in his confusion of mind and disassociation of ideas he does not control himself as we would, but laughs, or shouts, or curses, or moans, according to his interpretation of his feeling? Is it strange that he should vomit, or tear or soil his clothing, or that he should sit for hours in a stupor?

If, in an insane individual, the emotional field is always in evidence, as it appears to be, is it not natural to suspect that these same emotions, through different bodily changes that they are conceded to produce, may also produce some other intangible third factor which acts in an unknown manner upon the brain and upon the cord? Is it not a fact that whenever we meet with a mentally sick person, we find somewhere

in the history, that there is some strong emotion that for years has not been in evidence?

Perhaps we can present a theory to the effect that long continued grief, long continued anger, fear, jealousy, suspicion, sex repression, or even happiness, over a number of years, may be at the bottom of some of our common types of insanity? Freud is not to be studied too seriously, but he has described a series of emotionally accentuated ideas in a suppressed state, largely of a sexual nature. Brill has carried these ideas along and many students follow literally the "Interpretation of Dreams." Psychoanalysis is common practice. We may or may not accept Freud, but it seems that we have not as yet given serious enough study to the unexplained and unrepressed dreams and desires and emotions and instincts, which long buried deeply in the maze of normal intelligence comes slowly to the surface through some cause not yet learned, and appear in all their grotesque garb, stamping the once believed normal individual as deranged.

Perhaps if we could learn to study our friends and relatives more carefully and earnestly, much mental sickness could be avoided. Perhaps it would be well if we could come to learn what emotions are strong in those about us. Most of us have been fortunate enough to come in contact with cases which were peculiar, cases which caused us considerable concern at the time because of our ignorance. We may have seen several such cases and may have been able after years have passed to get to the bottom of some of them and to have been greatly surprised and greatly enlightened. A mental case is always extremely interesting. Many of them are more tragic than fiction and some of them might have been prevented.

We say that our sister is odd. We take it for granted that she is different and we pay so little attention to her that we are astounded when she develops psychotic symptoms. Often a little help, a little sympathy, a little genuine understanding manifested at the right time, may prevent a mental break. Our children, as they grow and develop, deserve our very closest attention, as to their little habits and childish ideas and little periods of emotional excitement. It is not the infections that we need fear in preventing insanity. It is our own lack of understanding of our associates. We are all selfish, and we all take too much for granted.

We meet with one who has become stranded and confused, and to whom the problems of life

have appeared unsurmountable to the extent that he knows not what to do. We say that we always expected it, or if we did not, someone else is always found who did. And nothing is done; no sympathy, no interest, is shown until the symptoms have actually developed and then it is everlastingly too late.

Our acquaintances are all about us; they are just as we are,—made of the same material and each working out his problem in his own way. If we will observe a little more closely we may find that our brother is behaving in a manner that is different. He may be becoming a trifle impatient, a trifle quarrelsome, a little bit moody. Nothing definite, perhaps, but yet different. Our friend may be a trifle too optimistic, or a little bit more talkative and cheerul than was his wont. Our cousin may be keeping more closely to her room and we pay no attention to her absence. Hundreds of little changes in habits that apparently mean nothing and which occur over periods of months or years may have a tremendous portent. Little buried griefs, little hidden troubles, little experiments along unusual lines of behavior, a series of psychic shocks, which in themselves are nothing, contribute as a rule to a terminal result which may be appalling. We do not know what is happening in the mental field in which this takes place. We do not even know that anything is changing. The individual is normal to us because of our lack of observation and he is also normal to his friends until something takes place in his behavior which is too extraordinary for understanding, and from that point we give him more attention, with the result that in a short time we realize that he is definitely insane.

To summarize—The symptomatic psychoses are thought to have a definite somatic, but extra nervous origin. In them there is thought to be an indefinite third factor, which is not as yet clearly understood. This is accepted by authorities. It has been shown that the emotions and instincts work definite physical changes upon the human organism. There may also be a third factor involved in the etiology of the unsymptomatic psychoses, this factor interposed between the bodily changes wrought by the exaggerated sensibilities and the brain structure itself. We are constantly working along lines of preventive medicine in all fields and we should begin to pay more attention to prevention of mental sickness. Our manner of doing this should be by closer observation of the habits and behavior of those about us. It is not enough to say that it just happened. Some interference or help at the right time may prevent a mental break or, at all events, postpone it. If it comes, the damage is permanent and the treatment is not satisfactory. It will not be time wasted if we come to know one another better.



## THE PRESENT STATUS OF PHYSICAL THERAPEUTICS\*

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Accurate evaluation of any therapy requires:—

1. Critical analysis of immediate and remote results.
2. Standardization of technic and of agency administered.
3. A reliable source of information.

Modern physical therapy has been existent only since the great World war; insufficient time has elapsed to permit of the close liaison between carefully controlled clinical and laboratory investigations so necessary before the basic principles of any therapy can be established. However, certain data of value have already been verified and are available to the regular medical profession through the official journal of the A. M. A., other standard medical and surgical journals, and the official reports of the Committees on Hospital Standardization of the American Hospital Association<sup>1</sup> and the American College Surgeons<sup>2</sup>.

The Council on Physical Therapy of the A. M. A.<sup>3</sup> was established in 1925, and consists of a body of men eminently fitted by their previous experienced and unquestioned ethics, to exercise the necessary ability and authority required in the correction of the existent physiotherapeutic chaos. This council has a worthy precedent in the labors of the Council on Pharmacy, which has no successfully standardized drug therapy in this country. The Council on Physical Therapy has already accomplished a great deal in delimiting the actual status of the various physical agencies, and reference is hereby made to the official reports as published from time to time in the *Journal of the American Medical Association*.

The first report of the council appeared in August, 1916, and emphasized among other things that physical therapy is NOT synonymous with electrotherapy nor any other form of aparatotherapy. Physical therapy is the scientific application of physical agents in the treatment of disease.

Physical therapy includes in addition to electrotherapy, the use of heat, light, radium, x-rays, and other invisible radiant energy such as ultraviolet and infrared radiation, the penetrant heat of medical diathermy and the destructive heat of surgical diathermy, also the various forms of hydrotherapy and massage. The Council urges however, that all these agencies must be administered either by or under the direct personal supervision of a well trained medical man who is skilled in their use. Physical therapy must be practiced merely as an adjunct to medical and surgical treatment, and strictly speaking is a specific for no disease condition as yet known. Physical therapy must be practiced as part of the

triad of medicine, surgery and physical therapy. It must never be used where there is a definite indication for specific medical or surgical attention, and always after careful physical and laboratory examinations have been made.

It is evident that this ideal can only be attained by the training of regular medical men in the basic principles, and these should, according to the Council, be inculcated in the regular medical and premedical schools and by suitable authorized instruction sponsored by medical societies and associations<sup>4</sup>. A part of the scientific program of every medical society should from time to time be devoted to a discussion of physical measures of treatment.

In subsequent reports the council has emphasized the necessity of standardization of apparatus<sup>5</sup>, has adopted rules for putting this into effect, condemns commercial instruction to laymen and physicians, discredits the installation of apparatus in the patient's home for self administration, and of the establishment of physiotherapeutic laboratories by laymen, nurses and technicians, even though the major part of their work is presumed to have been referred by a physician.

Excellent treatises upon window glass substitutes and the use of external heat<sup>6</sup> in the treatment of disease have recently appeared in the *Journal* and emanate from the council. Other articles appearing in the official journal are too numerous to abstract, but among others recently appearing are the following:

1. Howard Kelly<sup>7</sup>, on Surgical Diathermy (endothermy) in gynecology. This advances the idea of its use in body cavity work—for the treatment of metastatic nodules. Generally speaking this practice is dangerous and should be condemned. In the hands of an expert and in malignancy this technic may be cautiously employed.

2. David I. Macht<sup>8</sup>, on pernicious anemia. The phytotoxic index of pernicious anemia blood serum has been markedly decreased by irradiation with ultraviolet both in vitro and in vivo. Heuer and others have observed a coincident remission of symptoms in patients irradiated.

3. F. B. Granger<sup>9</sup>, "The Use and Abuse of Physical Therapeutics." Granger is a member of the Council, holds the chair of physical therapy at Harvard, and well exemplifies the present viewpoint of all leaders in this field of work. This viewpoint may be best understood from a quotation by Epictetus, "If they who find many faults in it were as familiar with it as I am they would find many more." After a careful presentation of the value of physical therapy as properly used in traumatic injuries, diseases of bone, adherent scars, bursitis, peripheral paralysis, neuritis, pneumonia and arthritis, also in certain forms of skin lesions, he boldly attacks the problem of its abuses.

\*Presented at the meeting of the Seventh District Medical Society at Danville, Indiana, October 25, 1927.

1. Faulty diagnosis, inaccurate observation and over-enthusiasm.
2. Lack of teamwork—and the utilization of other specialties.
3. General paucity of knowledge of the subject.
4. Low standards intellectual and ethical widely prevailing.
5. Electrosurgery by physiotherapists who are not surgeons, or by surgeons without physiotherapeutic training or assistance.
6. The failure to employ physical therapeutics when indicated.
7. The reference of only incurables and undesirable patients to physical therapy. Results in such cases are not a true criterion of its real value.

*Status in Hospital Practice.* In 1925 there were only twenty-four hospitals having a department of physical therapy as contrasted with three hundred one in 1926. The committee on hospital standardization of the American College of Surgeons has recommended but does not require a physical therapy department for every hospital, and supervised by a full time medical physiotherapist. The American Hospital Association<sup>1</sup> through William Walsh, secretary, advises every hospital to secure at the very outset a well trained medical physiotherapist and commission him with the authority to decide upon matters as to space, installation of equipment, and supervision of personnel and technic.

At the Robert Long hospital, the department is operated as a subdepartment of medicine, and is used for teaching purposes, as well as an adjunct to medical and surgical therapy. Report of the first year's operation showed one hundred ninety-three individual patients made a total of two thousand five hundred fourteen visits to the department and given five thousand one hundred ninety-seven treatments, about two different agencies used at each visit to the department. The average number of days per patient was 8.58. Results as evaluated by the staff were thirty-three per cent cures, thirty-three per cent markedly improved, seventeen per cent slightly improved and seventeen per cent failures. A fair interpretation of results would be that in sixty-six per cent of cases the therapy was of definite value, and of questionable or no value in the remaining thirty-four per cent. The greater number of cases, sixty-six, were referred from the medical department, and of these arthritis and other chronic affections head the list. A large percentage of these cases had deformities, or advanced organic tissue changes and had been resistant to previous therapy. These cases showed no cures, only forty per cent markedly improved. Results in almost all other cases averaged better than this. Acute or subacute traumatic lesions, infections with drainage, skin lesions, eczema, psoria-

the poorest results of the entire series, the results being practically nil.

We have seen that in carefully controlled cases at a university clinic, referred from many different services, medical, surgical, orthopedic, dermatological, genitourinary, eye, ear, nose and throat, and mental and nervous, that definite value was demonstrated in only sixty-six per cent, possible adjunct value in an additional seventeen per cent (most of these were cases which had been furloughed or transferred to other services for operation—and hence the true status could not be determined) and seventeen per cent complete failures. These figures should disabuse any one from the conception that physical therapy even when practiced under optimum conditions is either a panacea or a specific for any disease.

Moreover, in general practice outside of hospitals it is fair to assume that the percentage of error and of failure will be much greater when physical therapy is the sole form of treatment used. Such has been my own experience in general office practice in the past five years. Many of these cases have been luetic, or of a type which would require some other type of medicinal or surgical therapy. On the other hand I have seen positive harm done to patients especially in those associated with a markedly increased metabolism such as in advanced or exudative pulmonary tuberculosis. I have seen nonmalignant lesions irritated into cancer or melanotic sarcoma by previous ineffectual attempts at removal by so-called fulguration, rather than by the more distinctly surgical technic of properly performed surgical diathermy. Medical diathermy has been vastly overrated and abused. Deep penetrant heat is possible in far less amount than formerly thought, and is dependent upon consummate attention to detail as to technic not possible to cover in a paper of this scope. Diathermy in sinusitis which is not draining properly, invariably makes it worse. The same rule applies to pus anywhere in the body without drainage. Quartz light is efficient when properly handled. Its lack of penetrating power should disabuse anyone of its efficacy as a direct bactericidal agency in deep lying infection. Surgical diathermy of tonsils and other nonneoplastic lesions within body cavities is less efficient and far more dangerous than the standard surgical technic, and has been vigorously condemned by Novak<sup>10</sup> and others, and practiced by few well qualified otolaryngologists. The best we can say for it is that it must be held *sub judice* along with electrothermic or electrolytic therapy within the other body cavities.

#### CONCLUSIONS

1. Physical therapy although of real value when used as an adjunct to medicine and surgery, is not a panacea, is not even a specific for any sis, verrucae and epithelioma gave the best results. Psychopathic cases and hysteria showed



proven disease, and has been greatly over-exploited and abused both by medical and pseudo-medical practitioners.

2. The abuses of physical therapy are due not so much to the inefficiency of the apparatus as it is to inadequate or inappropriate use.

3. Correction of this state of physiotherapeutic chaos requires the determination of basic principles, standardization of apparatus and technic, and critical analysis of results.

4. This can best be accomplished by following the recommendations of the Council on Physical Therapy of the American Medical Association, and allied organizations of regular medical men, which have been officially recognized by the American Medical Association.

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#### CLINICAL ADVANTAGES OF DOUBLE STETHOSCOPE

The stethoscope described by L. Napoleon Boston, Philadelphia (*Journal A. M. A.*, June 4, 1927), differs from other stethoscopes ordinarily in use in that it consists of two Bowles disks. The disks are connected by rubber tubing with a central Y bivalve switch attachment. Through this central attachment, vibrations from either disk can be excluded or allowed to pass to the ears. Sound received through one of the disks may be analyzed and a mental record of its characteristic features obtained. Without changing the disks or removing the ear pieces, one can turn the switch valve and make the same clinical, auditory record over another portion of the body. The double stethoscope, while of special importance in the teaching of physical diagnosis, will, Boston believes, be found of service by the astute diagnostician in the elucidation of such problems as: (1) a comparative study of the apexes of the lungs, in incipient tuberculosis; (2) the degree of accentuation of the aortic and pulmonic second sounds of the heart in pulmonary and systemic circulatory embarrassment; (3) the study of systolic aortic, systolic mitral, and systolic tricuspid murmurs.

#### WHY INDUSTRIAL SURGERY IS SPECIALIZED FORM OF SURGICAL PRACTICE

George W. Hawley, Bridgeport, Conn. (*Journal A. M. A.*, June 4, 1927), says that in industrial surgery it is important to treat not only the injured part of the human machine but also the mental apparatus that runs it; to develop the treatment so that it is effective from the beginning to the end, and to have hospitals and surgeons organized to do the best repair work, and, in the shortest time, return the injured man to work. The profession is unorganized to meet the demands of modern industry and is cautious of its contact with things commercial. But industry is and must be commercialized. It cannot be otherwise. Nevertheless, both industry and the medical profession have much to learn from each other. The profession has something to give and to sell, and to sell to organizations as well as to individuals. Corporations and the carriers are anxious to buy, and to pay well, because they have found that in medical service the best is the most economical. But they look in vain for the men trained and the hospitals equipped to supply the service. General surgeons of experience devote their attention chiefly to major surgery of the trunk and head, and junior surgeons look on the lesser problems as steps to bigger ones, so that while major surgery is well done, minor and accident surgery is, on the whole, poorly done. It has been neglected and, having been neglected, it offers a promising field for those who would take it up as a life work and become proficient in it. It is hardly a rash statement to say

that there is really no such thing as minor surgery, for an injured hand may be as important to a workman or to a surgeon as a surgical disease of the abdominal viscera. The industrial surgeon has the vision and feels the necessity for results measured in terms of use, whereas to others the vision is often limited to the satisfactory healing of the injured part and they do not feel the same necessity for anything beyond this. Many men with broken limbs have been discharged when union is complete and have had to work out their own salvation and recovery of function. One can hardly wonder that those who are carrying the liability for the care of thousands of injured employees have taken notice of the shortcomings of surgical practice as they find it on the whole throughout the country—an indifference to this kind of surgery, and a wide variation in the methods employed, the results obtained and the time consumed in the treatment. There is the problem of treating the man and not just his injured limb. How often it happens that treatment is limited to the trauma and the man allowed to think for himself or his pessimistic friends to think for him. The picture is common of the man who acquires the fixed idea that he is crippled for life, acquired from somewhere or someone, usually a friend, sometimes from a nurse or his physicians. And when acquired it is difficult to remove. Another interesting subject is the relation of deformity to disability, a subject which has barely been touched, but one which offers a field of fruitful study.

#### USE OF EPHEDRINE IN BRONCHIAL ASTHMA AND HAY-FEVER

Simon S. Leopold and T. Grier Miller, Philadelphia (*Journal A. M. A.*, June 4, 1927), in reporting the effects of the use of ephedrine in fifty-nine cases of bronchial asthma and eleven cases of hay-fever, show that: Ephedrine produced complete temporary relief in 56 per cent of the cases of asthma and 63 per cent of the cases of hay-fever. In asthma the best results were obtained in the allergic and reflex nasal cases (84 and 100 per cent, respectively), and least satisfactory results were obtained in the infectious group, although even in this series a sufficient number obtained complete temporary relief (38 per cent) to justify its trial. Of all the patients with nasal obstruction (three reflex nasal cases and nineteen allergic ones), 86 per cent were completely relieved. In addition to producing bronchial dilatation, ephedrine orally administered produces contraction of the nasal mucous membrane. The oral administration of ephedrine in cases of hay-fever has advantages over its local application in the nose in that the local irritating effects can thus be avoided and in that, for the patient, it is a simpler method of administration.

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## EDITORIALS

### THE COMMON COLD

The medical director of Armour and Company, of Chicago, says that he does not believe that the common cold should be regarded as an infectious disease, and he says he bases his opinion upon long experience in observing and treating common colds in thousands of employees over a period of years, as also his inability to produce a cold by inoculation. He admits that common colds may spread through families or institutions where people are closely associated, but he says that this does not come through contact, but unhygienic conditions of environment, together with an altered metabolism and a systemic disturbance affecting all of the secretions of the body. Neither does he believe that the influence of climate has much bearing upon the subject except as climatic variations inhibit normal activities and decrease our utilization of protein foods which always are taken in excess of what we normally require. We eat too much and exercise too little in cold weather. Colds are less frequent in warm weather because we eat less of high protein foods and exercise more. He says that in the great industrial concerns the time of the greatest incidence of colds is on Mondays and days following holidays, and also days following banquets and parties where there is an abundance of good things to eat, or excess of protein.

In this connection it is appropriate to reprint Emma Tolman East's poetic effusion which appeared in *Clinical Medicine* for March, 1921, and which is as follows:

A cold is not a cold to me—  
It's Nature's way to tell  
That I've been dining recently,  
Not wisely, but too well.

A snuffly nose has come to mean  
That I've enjoyed, erstwhile,  
Some breaded pork chops, nestled deep  
In sweet spuds, "Southern Style."

And when I puff germ-laden coughs  
At "L" trains full of boobs,  
I know it's lobster, broiled alive,  
That fouls my bronchial tubes!

Or else, perchance, a wondrous steak  
With onions crisp and brown  
Has made my liver make of me  
A menace to the town.

Or it might be a chunk of cheese  
Or mince pie, hot and sweet,  
So, a cold is not a cold to me—  
It's just—too much to eat!

Therefore, the old slogan, "starve a fever and feed a cold," does not hold true. On the contrary, dieting and elimination is applicable, and in view of the fact that people suffering from colds usually are suffering from a mild acidosis, alkaline water, together with large doses of sodium bicarbonate are indicated. As abortive treatment the medical director for Armour and Company prescribes bicarbonate of soda in sixty grain doses, accompanied by a large glass of hot water, every two hours for three doses. In addition to this he administers small doses of calcium and iodine, and has the nose sprayed with some mild antiseptic like 1 to 5000 solution of metaphen. His conclusions are summed up as follows:

"Colds are due to a disturbance of the alkaline reserve or balance.

"They are not infectious as we generally consider a disease to be infectious.

"Conditions capable of producing a mild acidosis are the contributing factors in producing a cold: High protein diet, lack of exercise, infections anywhere in the body.

"Colds can be aborted by administering sodium bicarbonate in doses large enough to thoroughly alkalinize the system, together with small doses of calcidin.

"Colds can be cured by the administration of the same drugs in small, frequently repeated doses."

We have quoted this at length for the reason that the views, in a large measure, coincide with our own. However, we think it is all bunk to talk about the common cold not being infectious. Hundreds of instances have come to our notice where by the wildest stretch of imagination it would not be fair to attribute the cold to anything else but contact with the infection. A lowered resistance favors the development of infection in one who has been exposed, and faulty diet, with an over-abundance of protein intake, undoubtedly aids in lowering resistance, but we do not for one moment believe that the cold arises by itself in an individual, irrespective of contact with others. This matter has been discussed so frequently and at such length by many observers, and so much conclusive proof has been offered concerning the contagiousness of colds, that further consideration of the matter seems unnecessary. We do, however, wish to endorse the treatment that has been recommended in the article in question.



inasmuch as it helps to overcome that which is a factor in causing as well as keeping up a cold.

### THE FUTILITY OF MEDICAL LAWS

Under the above title the casual reader would be inclined to believe that we have no faith in the effectiveness of medical laws. Our answer is that medical laws are like any other laws, they are effective for either good or bad if enforced, but are worse than no law at all if only half enforced. To be enforced over any considerable length of time a law must be backed by a healthy public sentiment which favors the enforcement of the law. Such a sentiment is created only through an analysis of conditions by the public, and recognition of the fact that the law serves a distinctly useful purpose. Oftentimes a law is enacted and afterwards enforced as a direct result of education of the public through propaganda of one kind or another which creates a sentiment not only for the law itself but for its rigid enforcement after enactment. So far as medical laws are concerned, most of the agitation concerning their enactment has risen primarily from the medical profession. Even in this manner it has not been the education carried on by the profession as a whole but rather by a small minority which is energetic and resourceful, and the balance have trailed, as it were, because every member of the medical profession as a whole has realized that the cause was just and in the interest of the public primarily rather than of interest to the individual physician. However, this influence on the part of the medical profession has in many instances been offset partially or wholly by the antagonism from those who aspire to positions occupied by physicians but who do not intend nor desire to go through the same course of education and training in order to reach that position in the minds of the public. In consequence we have seen in this country a great deal of leniency exhibited by various state legislatures in fixing standards for the practice of the healing art. The pendulum has been swinging back and forth, but in the end always toward increasing liberality. Insofar as the regular medical profession is concerned the standard has been on the increase for many years, so that at present one who practices medicine according to regular standards must possess a good pre-medical education, and have not only attended a prolonged course of medical instruction but supplemented that by hospital training. On the other hand, there have been pretenders or cults that have claimed that so much education, training and experience is not required, and they have been able to make the public believe as they do concerning the matter. In consequence we find many states legally permitting members of the pseudo-medical cults, with little or no medical education or training, to prac-

tice the healing art, or in direct opposition to existing laws prohibiting it. In other words, failure to enforce a good medical law has resulted in a condition that is equivalent to no medical law at all if the medical pretenders are permitted to practice without let or hindrance. Whenever a good medical law has been enforced, then the medical pretenders have thought to encourage sympathy and create a public sentiment in favor of either a relaxation in the severity of the law, or the creation of a new law to fit the desires of the pretenders. Thus at one time California had a law that really was effective in preventing the poorly educated and illy trained physician and the medical pretenders from practicing within the state. Unable to change that law by the legislature the medical pretenders finally took their cause to the public and, by referendum vote, secured recognition. The result has been that today California is the dumping ground for all the quacks, charlatans and medical pretenders of every kind and quality. California might as well have no medical law at all, so far as the present condition of things is concerned.

A few years ago Ohio secured a splendid medical law, one that not only protected the public but made it impossible for quacks and pretenders to secure legal recognition within the state. The law was enforced, and we all remember how the Ohio chiropractors went to jail in the hope that they could create sentiment in the minds of the people to the effect that they were being persecuted. They got nothing by that maneuver, so now they have reached out for a referendum vote that is scheduled for this month. If they secure favorable action through the referendum, then chiropractors will be granted all the legal rights and duties of regular physicians, and chiropractors will be permitted by law to treat infectious, contagious and venereal diseases, to sign birth and death certificates, practice in hospitals, state institutions and under the workmen's compensation law. At present the chiropractors in Ohio are licensed as limited practitioners after examination by the state medical board in basic branches such as anatomy, physiology, chemistry, pathology and diagnosis, and after an examination in chiropractic subjects by an examining committee of chiropractors appointed by the Board. If the chiropractors succeed in their referendum, then they will be permitted to treat infantile paralysis, meningitis, diphtheria, scarlet fever, tuberculosis, venereal diseases and other infections which they are unable to diagnose and which with adjustment method of treatment the illness would be aggravated rather than benefitted. They also would be permitted to practice obstetrics and to use drugs or surgery, or sign death certificates. In other words, if the chiropractors are permitted all of the rights and duties of regular physicians, then Ohio is going to legally recognize unscrupulous and unqualified practitioners, and it will prove costly

in sickness, suffering and death. Indiana has just passed a new medical law which, in a measure, is similar to the one that is on the statute books of Ohio today. It licenses chiropractors for limited practice. It is expected that our Board will enforce the law, but at present little money is available for such enforcement. However, if the law is enforced, are we not heading toward some such condition as exists in California, and which no doubt eventually will exist in Ohio? In short, are we not heading toward a dumping ground for quacks, pretenders and medical imposters of every type? This is not a cry of pessimism, it is a review of facts and what consistently may be expected, based upon present conditions and the history of the past.

The solution of the problem rests in education of the public. On the whole, medical men have been too indifferent to this very important matter. The average physician will howl like a stuck pig if things do not go the way he thinks they ought to go, but he seldom raises his voice in protest. His efforts to educate the public concerning the dangers of quackery have been misinterpreted, and his propaganda misconstrued for the reason that so much of it savored of sour grapes. Personalities must be dropped altogether and the matter handled along consistent and logical lines, which in the final analysis means the public should be told in unmistakable language what it means to have health tampered with by the ignorant and the untrained. People must be told and retold that if they are going to recognize education, training and experience in any field of human endeavor, then they must as a matter of pure logic recognize such in the practice of medicine. The question of practicing the teachings of any particular cult should not be mentioned, for it should be sufficient to point out, in plain and unmistakable language, that he who treats the sick must know the body and the relation of all of its functions when well or normal before he can know it when it is sick or abnormal, and that this kind of knowledge is not obtained in any so-called school that has as its stock in trade a variety of massage movements, dignified by the name of a school of medicine for the treatment of every ill to which flesh is heir. Unless the members of the regular medical profession are willing to give of their time and talents to the work of correcting a false impression that rests with so many people concerning the legitimacy of cult practice, we are bound to find our medical law futile, and Indiana will turn out to be a dumping ground for all of the quacks and pretenders just as California is today and as Ohio will be if the chiropractors and others of their ilk carry the referendum vote this month.

#### FALLACY OF CHIROPRACTIC

"An Anatomist's View of Chiropractic" is the title of an address delivered by S. E. Whitnall,

M. A., M. D., (Oxon.) M. R. C. S. (Eng), L. R. C. P. (Lond.) which is delivered before the medical society of the County of Kings, Brooklyn, N. Y., and published in the September number of the *Long Island Medical Journal*. Summarizing the claims that are made in various publications of the Palmer School the chiropractors claim that a vertebra becomes displaced, presses on a nerve at its exit from the spinal canal, and by so cutting off the flow of mental impulse, causes disease. The subluxation, as judged by examination of the spinal processes, and the disease is cured (?) by manipulation of the vertebrae thus discovered to be at fault. Apart from the preposterous theory of the real cause and cure of diseases by this means, Professor Whitnall says that he is interested as an anatomist in the purely mechanical question of vertebrae becoming displaced or subluxed, as claimed by the chiropractors. He then goes on to show that from an anatomical standpoint there isn't a vestige of truth in the statement made by the chiropractors, and points out that no anatomist ever has been able to discover any of the abnormalities which the chiropractors glibly talk about. He then quotes various anatomists, in particular the great orthopedic surgeon, Albee, who says that in all his experience he never has found any foundation for the theory of pinched nerves, inasmuch as the foraminae are too large to permit of any pressure, except in cases of dislocation, when paralysis results. Professor Whitnall says that his experience is the same as his colleague's in having never seen in the dissecting room a displaced vertebra or a reduced foramen. There are such malformations demonstrable by x-ray, and surely if they are so common as to explain the cause of all disease they often would have been noticed by such means. He then specifically says, "Some chiropractors, I am told, use the fluoroscope, but why do they not show x-ray pictures both before and after their treatments?" Doctor Morris Fishbein, in the *Medical Follies*, is then quoted as follows: "In the final analysis, chiropractic is based upon fallacy first, last and all the time, and the practice of it is pure fakery. As a matter of fact, chiropractic has obtained a hold upon the people by high pressure salesmanship, and the regular medical profession, capable of intelligently exploding all of the claims of the chiropractors, has been apathetic to the proposition and permitted the public to be humbugged."

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#### INSURANCE THAT DOES NOT PROTECT

The average insurance agent who sells sick and accident insurance is very glib in his promises concerning what his company will do in case you own a policy and have reason to try to collect. However, there are a large number of sick and accident insurance companies that really



avoid the payment of just claims as a direct result of some technicality contained in the policy. For instance, in some policies you will find a statement, usually in small type and rather inconspicuously placed, that "under no consideration will the company pay total disability for any sickness or injury that does not keep the policy holder confined to the house or hospital." Other companies, presumably with a desire to be a trifle more lenient, distinctly state that "a policy holder shall not be considered totally disabled if able to perform any of the duties of his ordinary vocation." You can argue until you are black in the face in trying to convince such a company that the average business man would have to be dead or unconscious in order to be totally unable to perform any of the duties of his usual vocation, for a man with both legs and both arms broken, and numerous body wounds sewed up, all consequent upon an accident, still can dictate business letters and confer with office assistants or workmen, and yet the strict interpretation of an accident policy containing such a clause as mentioned would prevent him from securing indemnity. We admit that the better class of insurance companies, and they usually are numbered among the old established companies, do not resort to such technicalities, but there are enough of the other kind to make the purchaser of an accident and health policy suspicious of all companies. We were quite surprised a few days ago to see on a blank of one of the supposedly high grade companies the following inquiry of the attending physician: "On what date during his disability was he able to leave the house, regardless of the purpose of his so leaving?" In reality, the company is attempting to avoid payment on this claim as a direct result of the fact that the patient was able to leave his home and go to the office of his physician to be cared for when suffering from an acute glaucoma, an extremely painful affection and one that totally disables. We have filled out hundreds of indemnity blanks for insurance companies, and it is our experience that the small companies, and especially the companies that furnish policies at cheap rates, are the ones that usually fail to furnish indemnity if they can get out of it. Some of our medical friends have had this experience, and we would like to remind them that when they take out any kind of insurance, no matter what it is to cover, it pays in the long run to patronize a very high grade company and pay whatever premium is asked, but read the policy carefully before accepting it. A cheap policy generally turns out to be expensive in the end. The members of the Indiana State Medical Association have had occasion to prove this fact in connection with automobile insurance secured from a Chicago concern at a reduction from established rates. Sev-

eral physicians who bought the policies are now sadder but wiser.

## EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital. We invite and urge you to use this Service.

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We want THE JOURNAL to serve you.

TYPHOID continues to be prevalent in Montreal far above normal. This is due either to laxness on the part of the Montreal health authorities or lack of machinery to carry into effect and enforce proper public health and sanitary measures. It is time for Montreal to wake up.

EPHEDRINE seems destined to supplant epinephrine in the treatment of asthma, and now announcement comes from London that a synthetic ephedrine is about to be put on the market. In all probability the synthetic preparations will be more reliable than the natural ephedrine which is very difficult to isolate.

In the *Fort Wayne Community Chest News* occurs the following significant statement: "Did you know that Indiana led in the number of smallpox cases in 1926 with 3,501 cases, while Massachusetts with twice the population of Indiana and a larger foreign population had only four cases?" Evidently our public health propaganda concerning the value of vaccination as a preventive of smallpox is not working very actively.

EVERY medical society in the United States should make an organized effort to acquaint the people with the truth regarding the profession and its work. Too long have we permitted the quacks and the members of the pseudo-medical cults to give all the publicity concerning medical affairs that the public secures through the lay press. It is time that the regular medical profession should take a hand in this education of the public concerning medical matters.

In New York state they give kiddies "I Am Protected" buttons, indicating that the wearer has been vaccinated against diphtheria. In commenting on this, *Health News* says that "children, like many grownups, prefer to be on the popular side of a forward movement. This button, given to children who have completed their diphtheria

preventive treatment, will stimulate other children to get their consent slip signed." Not a bad idea and we commend the enterprise to our own health boards.

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THOSE Indiana physicians who have been patronizing the Standard Laboratories, Incorporated, of Chicago, may be interested in knowing that the concern has filed a voluntary petition in bankruptcy. The concern really played upon the credulity of physicians and found many suckers. Great inducements were offered, and physicians, for the most part gullible anyway, swallowed the bait, hook, line, sinker and all. Again, we would like to suggest that physicians will do well if they steer clear of these unusual propositions that offer something for nothing.

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THE liver treatment of anemia requires that those patients eat at least a half pound of liver daily in order to procure satisfactory results, and in some patients even to keep alive. Many patients do not tolerate this treatment well, and some can scarcely take it at all. Recently it has been announced that the essential components of liver have been prepared in the form of an extract, a dram of which is equivalent to a whole pound of liver. Certainly, this ought to simplify the matter of the liver treatment for pernicious anemia and it will prove far more acceptable to the patient.

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INFANTILE paralysis is reported in several sections of Indiana. Some of the health officers inform us that there is considerable question as to the diagnosis in some of these cases. No doubt it is well to create a healthy respect in the minds of the public concerning the dangers of this communicable disease, but from the scientific standpoint we believe there should be a careful analysis of all suspected cases before a diagnosis of infantile paralysis is made or otherwise we are apt to create unnecessary alarm, to say nothing of putting many people to considerable inconvenience in view of the isolation.

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SOME persons may consider priapism a blessing rather than a curse, and yet treatment of this condition not infrequently is sought, and sometimes relief is difficult to obtain by any means. Now comes an assistant surgeon of the United States Public Health Bureau who recommends an application of ethyl chloride to the perineum, being careful not to involve the testes and used to the point of freezing or blanching the tissues and no further. Almost immediate relief is secured, though a few days later perhaps another application may be needed, after which no further recurrence is known to occur in the cases in which the treatment has been tried.

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THERE is an old saying that "It is a poor doctor who will not take his own medicine." We believe that this applies to the question of immunizing children against typhoid, smallpox, scarlet fever, and any other communicable disease that may be prevented by vaccination which should be practiced in the families of physicians the same as in other families. Furthermore, physicians and nurses could set a good example as well as protect themselves by being immunized against typhoid. In other words, it would look a good deal better if physicians who are preaching the need of protection against disease would follow some of the advice themselves.

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OHIO physicians are asking the farmers if they would accept chiropractic for hog cholera, glanders, or bovine tuberculosis. The average Ohio farmer is no better than the average Indiana farmer, and we know that Indiana farmers will spend more money and use more good sense in caring for their hogs than they will in caring for their children. A veterinary surgeon will charge five dollars, and extra for the serum, for treating a sick hog, and the owner of the hog will pay it without complaint, but if a physician charges the same amount for treating a diphtheritic child belonging to the same family, a howl that can be heard a mile will be put up at once.

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"WHO Shall Grade Clinical Laboratories" is the title of an editorial in *California and Western Medicine* for September. We think that question is answered easily by accepting the standard established by the A. M. A. which concerns those laboratories that desire to have professional approval that will be acceptable to the medical profession as a whole. Naturally there will be laboratories that do not care to meet the requirements, and, in fact, are unable to meet the requirements. Such laboratories will oppose having any standards, but for the protection of the medical profession as well as the public we should have standards, and for the time being none are better than those proposed by the A. M. A.

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THE other day a woman said to us that she was feeding her children on the vitamin theory, or, in other words, selecting the food for them on the basis of the vitamin content. She talked glibly about the percentage of vitamins existing in certain kinds of food, and the reason for a rigid selection in determining upon the diet of her children. During the conversation it developed that the information had been obtained from a fanatic on the subject of food and who profits by spreading a certain propaganda, as he owns a controlling interest in some food manufacturing. Every well educated physician knows that vitamins must be considered in estimating



food values, but the subject is greatly overworked, particularly by lay persons.

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PHYSICIANS are their own worst enemies. As a rule they are jealous of each other's success, and some of them are the rankest kind of knockers. Recently we learned of an instance where a surgeon performed a difficult operation and charged a comparatively small fee for the services, though the patient really was able to pay the regular fee. Later he was surprised to have indisputable evidence furnished to the effect that a confrere had advised the patient not to pay the bill as it was "highway robbery." No doubt this experience is duplicated many times in the various communities of the state. Why do physicians make the practice of medicine more difficult for themselves by knocking confreres? Why can't they be boosters instead of knockers?

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Not long ago we heard a remark among a crowd of young people who were reveling at an hour past midnight, that they could go home when they couldn't go anywhere else. This tendency to burn the candle at both ends is bad enough in grown-ups, but it is demoralizing to health and morals when followed by youngsters in their teens. Altogether too often physicians are called upon by a fond mother to prescribe for a frail, anemic appearing and neurotic daughter when what is most needed is a little parental advice and discipline. If mama's pet daughter will cut out some of the night life, oftentimes associated with booze and cigarettes, and adopt a sensible dietary and secure a rational amount of sleep, she will have no occasion to consult the family physician for the relief of anemia and neurotic symptoms, and she probably will have a better disposition in the bargain.

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THE LADIES HOME JOURNAL has built up a tremendous circulation. While this circulation in a very large measure depends upon merit, yet it also has been secured as the result of a lot of high-pressure salesmanship. Right now the publishers of the *Ladies Home Journal* are working the churches, and everyone knows what that means, for if a communicant of a church is asked to subscribe for anything on the understanding that a portion of the subscription money is going into the church coffers, it is very likely that the subscription will be forthcoming whether the periodical is wanted or not. Thus the publishers will add a very large increase to the subscription list during the next few months as a direct result of what probably is a systematic and thorough canvass of the churches of the United States. The church members will secure something for their money any way that you look at it, for the *Ladies Home Journal* is worth the price; in fact

we wonder how the publishers can produce so much literary value for so little money.

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POSTGRADUATE courses are getting to be very popular, and especially those given in connection with medical societies. Also there are the postgraduate courses given by individual instructors who go to the various cities to give such courses, or who invite physicians to come to them. We would like to suggest that whenever ten to thirty doctors in any community desire to obtain postgraduate instruction it will be possible for them to have it brought to their own doors if they will unite in employing a competent teacher and will agree upon the subjects to be given in the course. Paying a teacher to come to them will cost far less than for such a class to go to him at some university in America or Europe. Taking two hours a day for one or two weeks at home requires much less sacrifice of time and money than going to New York, Boston, London or Vienna for the weeks or months that are required to get the same hours of instruction. In fact, we feel satisfied that courses of university quality may be available in any part of the country.

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A PHYSICAL therapy fanatic, possessing more enthusiasm than common sense, announces in a bulletin of a sanitarium that the time is rapidly approaching when no modern home will be considered complete without a physical therapy room containing various baths, an ultra-violet light machine for giving artificial sun baths, exercising machines and other gymnasium equipment, and windows containing glass which will transmit the ultra-violet rays of sunlight. It does not seem to have occurred to the enthusiast that all of this equipment will cost so much money that none but the very rich can afford to have it. We feel justified in saying that if some of the people who expect to get results from such an equipment could be turned loose for about one hour daily with an old fashioned bucksaw and a wood pile, and compelled to get busy on the winter's supply of wood, there would be no occasion for using such deluxe equipment as predicted to become a part and parcel of the wealthy home of the future. Really, isn't it about time that physicians should take a good swat at some of the crazy ideas advanced to help a lot of fool people get away from natural, healthful and plain living?

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ST. LOUIS has been the home of a number of manufacturers of fake medicinal remedies of various types offered as cures in the treatment of certain diseases. One of the worst offenders is the Walker Pharmacal Company, and right now our special condemnation refers to their preparation marketed under the name of *Succus Cineraria Maritima*, for which good results in the treatment

of cataract and "other opacities of vision" are claimed. Despite favorable testimonials, which mean absolutely nothing and not one of which will bear the light of scientific investigation, ophthalmologists of experience and training and later the Bureau of Investigation of the A. M. A., have pronounced this so-called remedy a fake in that it never has and never will produce the result claimed for it. However, the Walker Pharmaceutical Company has continued for years to market this preparation and extend its sale through propaganda circulated among physicians of the gullible type, and judging from inquiries that have come to us in the last few months, an effort now is being put forth to increase the sales in Indiana. We sincerely hope that no member of the Indiana State Medical Association will be gullible enough to pay any attention to the preparation mentioned, or the claims that are put forth for it.

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A LOT of fool women and young girls are ruining their health by dieting to get thin. Now comes a prominent authority who says that tuberculosis is increasing as a direct result of this foolish fad of dieting. However, despite all of the warnings of the medical profession, and the dictates of common sense and reason, the female of the species will continue to make blooming asses of themselves if they think that dieting will add to their physical appearance and increase their physical charms. The average woman will run any risks and make any sacrifices to follow the dictates of fashion. She usually says that she does so many foolish things concerning dress and physical appearance in order to make herself more admired by the male sex, but there isn't one young or old man out of a thousand who admires a thin, willowy, flat-chested girl. The trouble of it is, men have to take these out-of-shape, cadaverous females for the reason that there are not enough plump ones to go around. At present there seems to be a movement on foot to make plump girls fashionable, and that movement will gain some momentum if the women themselves can be convinced that plumpness means to be fashionable. Certainly, the women will not be influenced by any preaching to them that dieting helps to produce tuberculosis or any other disease.

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IN pre-prohibition days most of the well advertised and extensively sold patent medicines of the liquid variety were nothing more than cocktails whose principal virtue resided in the alcoholic content. They were widely sold to temperance people, and many an old deacon who was fighting the saloon and preaching about the ill effects of alcoholic beverages was, in fact, an alcoholic addict himself as a direct result of the regular imbibing of patent medicines like Peruna

containing twenty-five per cent of alcohol, or Hostetter's Bitters, containing forty-four per cent of alcohol which latter is a trifle less than the alcoholic content of pure whiskey. When the eighteenth amendment came into effect it was thought that these cocktails, masquerading under the name of medicine, would have hard sledding, but we find that such is not the case, for Peruna is still on the market and going strong with its alcoholic content of twenty-five per cent, and Hostetter's Bitters, the old stand-by, is still on the market with its forty-four per cent of alcohol, and both purchased eagerly by many of the good church people and temperance advocates who are quite willing to testify to the beneficial medicinal effects. It is a little nauseating to think of the farce being enacted in trying to enforce prohibition when proprietary medicine manufacturers are able to sell their products without let or hindrance. As the Bureau of Investigation of the A. M. A. well says, "This is one of those mysteries that only government bureaus can explain."

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THAT people like to be humbugged is amply proved by the knowledge that a large proportion of our population, at some time or other, patronizes quacks and medical swindles of various types. Right now we have in mind a physician in an adjoining state who constantly has a long line of patients waiting for the minute or two of superficial examination that he makes, and for years he has continued to hold the patronage of a lot of gullible people, not because he is giving trustworthy service but because of a kind of psychology that accepts silence and a wise look as uncanny intuition that recognizes the pathologic condition without the necessity of making anything more than a cursory examination, and pays for it willingly in the small fees exacted. It is true that some cases are cured by this superficial attention, for many of the conditions that take patients to this physician are of the kind that would improve under most any kind of palliative treatment or perhaps would get well without treatment in due course of time. On the other hand, there are countless numbers of cases amenable to treatment, or even curable under appropriate treatment, that never receive trustworthy attention for the reason that they are not properly diagnosed, and could not be recognized by any superficial method employed. They go on from week to week or month to month deluding themselves with a species of optimism that they may get better under the ministrations of a man who seems to have the confidence of such a host of people.

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THE secretary of the Madison County Medical Society very pointedly says in an open letter to the members of his society, "There are nine physicians who haven't paid their dues and who have



had four free dinners this year. I am going to give a dinner myself one of these days and the delinquents won't be invited." It ought to be a little embarrassing for any physician to be told that he is delinquent in paying the small sum required as dues to his local medical society, and "sponging" some meals at the society's expense, and yet there is no reason why the matter should be kept quiet. In fact we have proposed that county medical society secretaries print the names of the delinquents in the announcements sent out generally. Some of the delinquents will howl if such a drastic measure is put in force, but such men usually howl anyway whether they are hurt or not. We have noticed that there are two classes of medical men who pay their dues promptly. In the first class are the physicians who are the most active and progressive in the community; in the second class are the physicians who are clinging to respectable medical societies by a very slender attachment, and in fear of being dropped altogether they are very careful to see that dues are in on time. Those referred to by the secretary of the Madison County Medical Society are delinquent for nine months, and probably every mother's son of them gets mad every time the secretary reminds him that the dues are delinquent. It would serve some delinquents right if they were suspended and not reinstated except by a unanimous vote of the active members of the society. It is barely possible that some of the delinquents would not get back, but perhaps there would be no loss and the society would be better off without them.

UNDER the title heading "Evolution Speeded up by the x-ray," the *Literary Digest* of October 8 quotes Professor H. J. Muller of the University of Texas, to the effect that evolutionary changes or mutation can be produced 150 times as fast by the use of x-ray as they can by the ordinary processes of nature. This means that man can force the production of new and desirable plant and animal varieties far more rapidly than he has hitherto been able to get them, but the x-rays affect the human hereditary cells, too, and the reckless exposure of these cells to long and heavy doses of the rays is apt to inflict fearful penalties on our unborn grandchildren. When human mutations arise in the course of nature, a family may be blessed with a Lincoln or an Edison, or it may be sickened and saddened with a child born mentally or physically defective. The production of mutations by x-rays therefore becomes a matter for serious consideration. Obviously x-ray doses of high intensity and long duration are things to be shunned, so far as they concern the physical basis of human heredity, and this point is stressed especially by Professor Muller. There is no danger in any ordinary x-ray examination anywhere on the body nor in prop-

erly regulated therapeutic treatments that do not come too close to the generative system, but the danger zone now is indicated clearly and the warning has been sounded unmistakably. X-rays have been resorted to more or less by persons desiring to limit the number of their children. The treatment results in temporary sterility which afterward passes, permitting the production of offspring. Professor Muller's work indicates that while the first children following such treatment apparently may be normal, they will carry concealed within them excessive mutations which may crop out as a horror or a curse to the third and fourth generation and to all succeeding posterity. As a means of birth control, therefore, x-rays are to be shunned.

SEVERAL years ago a robust young man, suffering from the effects of degenerative intra-ocular changes, suddenly developed almost complete detachment of the retina in each eye, and with it reduction of vision in either eye to light perception. Previous to this, the young man had been under the care of a well-known physician for several years without paying more than charity charges for the services. Following his incapacity the same physician cared for him gratuitously for months in the approved way in the hope of saving some useful vision, but without avail, though all of the recognized methods of treatment were employed. Subsequently another physician of the "lick and promise" type examined the young man and told him that the sight would be restored if directions were followed. The opinion was accepted without effort being put forth to determine its trustworthiness, and the home mortgaged to pay the physician several hundred dollars for the service that was supposed to restore vision. As an evidence of the ingratitude bestowed upon the original physician, the young man went from home to home and business house to business house proclaiming the belief that he was to be made to see, due to the miraculous treatments of the pretender into whose hands he had fallen, and that the faithful physician who had cared for him gratuitously over a prolonged period should be driven out of town because of his ignorance and criminal neglect. Naturally, the news hurt the feelings of the physician who had given so conscientiously of his time and talents without money and without price in an endeavor to save some vision for what is very generally considered a hopeless condition. Years have passed, and the patient now is as hopelessly blind as he was immediately following his accident, and he continues his ingratitude by claiming that if he had received proper attention immediately after his accident he now would be seeing. Well, as Aunt Het says, "Some people are made that way."

THERE are some physicians who are so puffed up with their own importance that they think that their confreres are willing to pay handsomely to hear them lecture or talk on some scientific subject. Usually such men are greatly overrated. They remind us of the small town female singer who went to the Boston Conservatory of Music for a few weeks for voice culture, and upon returning to the home town declared that ever afterwards when people wanted to hear her sing they would have to pay for it. She was invited to sing at a charity entertainment but before going on the stage demanded a fee in advance, which was paid her in view of the fact that the entertainment had been so widely advertised. The self-satisfied singer received a reception that she was not looking for, and it was in the shape of a bunch of antiquated eggs and spoiled vegetables that were thrown at her at the conclusion of her program. Our comments concerning this matter are inspired by the knowledge that the Indiana State Medical Association has been beautifully "trimmed" by a guest who padded his bill of expenses for appearance before the Association. The principal offender has a rather exaggerated and exalted opinion of himself, for there were those who heard him who said that the Association had put a "white elephant" on the program. It is refreshing to hear from another guest who, when asked for a bill of his actual expenses, answered, "The expenses of my trip were of no consequence, and I do not care to render a statement for them. I thank you very much for the opportunity you gave me to address your Association, and I want you to know that it has afforded me great pleasure to be with you." The Indiana State Medical Association does not grumble about legitimate expenses, and desires as well as intends to pay the actual expenses of guests invited to address the Association, but it has its opinion of pouter pigeon physicians who, when told that actual expenses will be paid, seize upon the opportunity to travel in regal style and include in the bill not only their own expenses but those of some of the relatives who go along for the trip. Well, we have to live and learn.

IN an editorial concerning the medical profession and the newspapers, the *Boston Medical and Surgical Journal* says some very appropriate things. Among other things was found the following: "Medical discoveries reach home to many people, consequently from the point of view of the newspaperman they make valuable news. However, the medical profession does not meet the newspaperman half way. We go to the editor and the reporter to obtain publicity for our hospitals, our clinics, and the meetings of our local or state societies. When they want information from us, however, we are loathe to give it to them. We have found that the average editor

is only too glad to co-operate with us in reporting medical news occasionally. The chief complaint of the newspaperman is that he cannot get adequate and authoritative statements on medical subjects, due to the prevalence of the long-age inhibition imposed on physicians through ethical consideration of avoiding publicity. More and more, however, the medical societies are coming to realize the value of publicity and the need for combating the cults through the public press. A number of medical societies have established committees for this purpose which have functioned quite successfully. One simple thing to do would be to give the newspapers straight facts when they ask for them, providing it may be done without advertising or undue publicity. It would be a very helpful thing if there were some group of men appointed by either local medical societies or state societies where newspapermen could obtain definite statements in regard to news items which have come in to the paper, and also to give out to the papers such items as they feel would be of value to the community."

We desire to inform our esteemed fellow editor that Indiana, through its State Medical Association, has a medical Bureau of Publicity that has been functioning for two or three years, and in a splendid way. Already the leading newspapers in the state are finding it not only convenient but advisable to solicit our publicity office for trustworthy information concerning medical news. In addition to the Bureau of Publicity, there are, in several counties of the state, committees on publicity appointed by county medical societies that have to do with all phases of newspaper publicity. The point is made that this publicity ought not only be trustworthy in every sense, but it must not bear the earmarks of personal exploitation.

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## DEATHS

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N. B. ASPINALL, M. D., of Plymouth, died October 11th, aged sixty-six years.

ALBERT A. WELLS, M. D., of Indianapolis, died recently. Dr. Wells was seventy-nine years of age. He had retired from the active practice of medicine. He was a graduate of the Long Island College Hospital, Brooklyn, New York, in 1878.

M. S. CANFIELD, M. D., of Frankfort, died October 2, aged seventy-five years. Dr. Canfield had served on the State Board of Medical Registration and Examination for more than sixteen years. He graduated from the Eclectic Medical College, Cincinnati, in 1873.



CALVIN SEYMOUR, M. D., of Wawaka, died October 4th, aged eighty years. Dr. Seymore graduated from the Indiana Medical College, Indianapolis, in 1847. He was a member of the Noble County Medical Society, the Indiana State Medical Association and the American Medical Association.

E. D. BATEMAN, M. D., of Lawrenceburg, died October 6th, aged fifty-five years. Dr. Bateman was a member of the Dearborn County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Medical College of Indiana, Indianapolis, in 1895.

THOMAS W. LONGFELLOW, M. D., of Martinsville, died September 22, aged sixty years. Dr. Longfellow was a graduate of the Central College P. and S., Indianapolis, in 1893. He was a member of the Morgan County Medical Society, the Indiana State Medical Association and the American Medical Association.

AUGUST G. OSTERMAN, M. D., of Seymour, died at a hospital in Fort Wayne, October 13th, aged seventy-four years. Dr. Osterman graduated from the Louisville Medical College, in 1874. He was a member of the Jackson County Medical Society, the Indiana State Medical Association and the American Medical Association.

JOHN H. OLIVER, M. D., of Indianapolis, died October 16th, aged sixty-seven years. Dr. Oliver was professor of surgery of the Indiana University School of Medicine. He was a member of the Indianapolis Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association and the American College of Surgeons. Dr. Oliver served as president of the Indiana State Medical Association in 1917. He graduated from the Medical College of Indiana, Indianapolis, in 1881.

ALFRED KANE, M. D., of Fort Wayne, died October 16th, aged forty-nine years. Dr. Kane was a lifelong resident of Fort Wayne and had practiced medicine in that city for twenty-five years. Dr. Kane was past president of the Allen County Medical Society. During the World war he served as a member of the military examining board. He was a member of the staff of the St. Joseph's hospital, Fort Wayne, and was a member of the Fort Wayne Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Fort Wayne College of Medicine in 1902.

## NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. T. HENRY DAVIS, of Richmond, celebrated his ninety-first birthday September 29th. Dr. Davis retired from the active practice of medicine in 1924.

DR. E. E. KIRK, of Spiceland, has removed to Richmond. Dr. Kirk has been a practicing physician in Spiceland for thirty-nine years. He has recently discontinued the active practice of medicine.

At the regular meeting of the Muncie Academy of Medicine, October 14, 1927, Dr. Charles M. Mix, of Muncie, presented a paper on "The Pathology and Symptomatology of Types of Acute Appendicitis."

At a meeting held at Rochester in August, the physicians of Fulton and Miami counties united to take advantage of the extension work offered by the Indiana University School of Medicine. Meetings will be held alternately at Rochester and Peru.

DR. GEORGE T. MACCOY, of Columbus, has presented his entire medical library of more than one hundred volumes, to the Bartholomew County Hospital. The books represent Dr. MacCoy's collection for the fifty-five years that he has been practicing medicine.

THE Elkhart County Medical Society held a meeting at the Hotel Elkhart, October 13. Following dinner at six o'clock papers were presented by Dr. John A. Wolter, of Chicago, on "Chronic Duodenal Obstruction" and Dr. Albert E. Bulson, Jr., of Fort Wayne, on "Simple Glaucoma."

At the meeting of the Thirteenth District Medical Society held in South Bend, October 5, Dr. S. T. Miller, of Elkhart, was elected president; Dr. F. V. Martin, of Michigan City, vice-president, and Dr. G. W. Kimball, of Laporte, secretary-treasurer. The 1928 meeting of the society will be held in Plymouth.

THE United States Civil Service Commission announces open competitive examination for social worker (psychiatric) at \$1,860 per year, and junior social worker, at \$1,680 per year. Applications for these positions will be received by the U. S. Civil Service Commission at Washington, D. C., until December 30, 1927.

THE Union District Medical Association held its meeting at Eaton, Ohio, October 27th. This was the one hundred twentieth semi-annual meeting of the Association. The Association consists of members from Fayette, Franklin, Henry, Rush, Union and Wayne counties in Indiana and Butler and Preble counties in Ohio.

AT the last regular meeting of the staff society of the Indianapolis Methodist Hospital in October, officers of the society were elected as follows: President, H. Mertz, M. D.; vice-president, P. McCown, M. D., and secretary-treasurer, Marie B. Kast, M. D. A paper on "Agranulocytic Angina" was presented by Dr. Rudisill.

THE Eleventh Indiana Councilor District Medical Association held its thirty-eighth meeting at Delphi, October 20. Papers were presented by Drs. Edwin Kime, of Indianapolis; R. C. Johnston, of Huntington; F. S. Cuthbert, of Kokomo; Paul W. Ferry, of Kokomo; James Wilson, of Wabash and Charles B. Bayer, of Indianapolis.

THE United States Civil Service Commission announces open competitive examinations for Assistant Medical Officer, Associate Medical Officer, Medical Officer and Senior Medical Officer. Applications will be rated as received at Washington, D. C., until December 30, 1927. Full information may be obtained from the U. S. Civil Service Commission, Washington, D. C.

THE United States Civil Service Commission announces open competitive examination for Junior Medical Officer (interne). Applications for this position will be rated as received by the Civil Service Commission at Washington, D. C., until December 30. Examination is to fill vacancies in the Veterans' Bureau Hospitals throughout the United States, and vacancies in positions requiring similar qualifications.

THE United States Civil Service Commission announces open competitive examinations for Trained Nurse and Trained Nurse (Psychiatric). Applications for these positions must be on file with the Civil Service Commission at Washington, D. C., not later than December 3rd. Examinations are to fill vacancies in the Panama Canal service, and in positions requiring similar qualifications. Full information may be obtained from the United States Civil Service Commission, Washington, D. C.

THE United States Civil Service Commission announces open competitive examinations for Senior Medical Technician (bacteriology), Medical Technician (bacteriology), Senior Medical Technician (roentgenology), and Medical Tech-

nician (roentgenology). Applications will be rated as received until January 7, 1928. Applicants should at once apply for Form 2374, stating the title of the examination desired, to the Secretary, Sixth U. S. Civil Service District, 403 Government Building, Cincinnati, Ohio.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

E. Bilhuber, Inc.:

Bromural.

Parke, Davis & Co.:

Diphtheria Toxin-Antitoxin, 0.1 L +-P. D. & Co.

Swan-Myers Co.:

Capsules Ephedrine Hydrochloride-Swan-Myers, 0.05 Gm.

ALL the departments of the State Board of Health are now in the State House Annex building at the corner of Market street and Senate avenue just across Senate avenue from the State House. On the first floor of the Annex building are the executive offices, housing, school hygiene, communicable diseases, child hygiene, epidemiology, venereal diseases, public health nursing and vital statistics. On the second floor are the food and drugs, water and sewage, food, milk and water laboratories, bacteriological and Pasteur laboratories, weights and measures and oil inspection. The new quarters are well arranged and convenient for the activities of the department.

## CORRESPONDENCE

### OBJECTS TO "MEDICAL FOLLIES"

October 25, 1927.

To the Editor:

This letter brings my appreciation of your straightforward editorial on page 399 of the October JOURNAL which expresses disapproval of the entertainment provided the Indiana State Medical Association and scheduled as the "Medical Follies."

I have talked with quite a number of the members who were present from different parts of the state, and all of them regretted the affair, except perhaps one who expressed lukewarm approval. For instance, one member told me he felt "personally insulted" and another that he "never expected to attend another state medical association smoker," etc, etc.

I agree with every word of your editorial, but am especially interested in the phrase which reads as follows: "Furthermore, physicians as a class have a peculiar responsibility to maintain the very highest standard of professional conduct, and such standards are gravely jeopardized by the semi-public display of objectionable and indecent jokes."

Sincerely yours,

C. NORMAN HOWARD, M. D.



## SOCIETIES AND INSTITUTIONS

### BUREAU OF PUBLICITY

September 26, 1927.

Meeting called to order at 4:45 o'clock.

Present: Wm. N. Wishard, M. D., Chairman; Murray N. Hadley, M. D.; James A. MacDonald, M. D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held September 19 read, corrected and approved.

The secretary was instructed to present the following report to the House of Delegates in annual session, September 28:

#### ADDITIONAL REPORT TO THE HOUSE OF DELEGATES OF THE INDIANA STATE MEDICAL ASSOCIATION BY THE BUREAU OF PUBLICITY

Gentlemen:

The work done by the joint committee of the New York State Medical Association and the State Charities Aid Association has come to the attention of your Bureau of Publicity. After studying the report of the New York Committee we recommend that your Bureau be given the authority to act as a special committee to confer with similar committees appointed by voluntary health agents on matters pertaining to the work of these public health organizations and their relation to the medical profession.

Your committee believes this should be done in order that those difficulties that often have arisen between public health agents and the organized medical profession may be avoided and that a detailed study may be made into the situation as it exists in Indiana.

This report was an addition to the formal annual report which was presented in the delegates' hand-book.

The secretary was instructed to write Dr. Wm. R. Davidson the following letter:

Dear Doctor Davidson:

The Publicity Bureau today considered your letter of August 26 with its suggestion that publicity be given the fact that the State Board of Medical Registration and Examination is supported from funds received from physicians and not supported by general taxation.

The Bureau suggests that you as a member of the House of Delegates prepare a resolution to be presented to the House of Delegates authorizing the Bureau of Publicity to disseminate the information that the state pays nothing and the physicians pay everything for the maintenance of the Board.

Dr. Wishard, chairman of the Bureau of Publicity said: "Let this resolution contain the facts so that it may be gotten before the public immediately."

If you decide to prepare such a resolution, it should be done in triplicate. We will be glad to help you out at this office.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole October, 1927.

WM. N. WISHARD, M. D.,  
Chairman.

THOS. A. HENDRICKS,  
Secretary.

### BUREAU OF PUBLICITY

October 10, 1927

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M. D.; James A. MacDonald, M. D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held September 26 read, and approved.

The following bill was approved for payment:

Central Press Clipping Service.....\$6.09

The following resolution introduced by Wm. R. Davidson, M. D., and passed by the House of Delegates of

the Indiana State Medical Association, September 30, 1927, was brought before the Bureau:

"Resolved, that the Bureau of Publicity of the Indiana State Medical Association be authorized to disseminate in its weekly release the information that the State Board of Medical Registration and Examination is supported by funds derived from physicians.

"2. That it is not supported by taxation.

"3. That it is limited in using funds derived from the fees of candidates for licensure."

In regard to the foregoing resolution, it is suggested by the Publicity Committee that every physician in Indiana at once and from time to time acquaint members of the Indiana House of Representatives and Senate with the fact that money received by the State Board of Medical Registration and Examination for fees properly belongs to the State Board of Medical Registration and Examination, and should be used by the Board in enforcing the law. The Board is anxious to do this, but cannot use any surplus it may have because the present law requires that this surplus annually be turned into the general fund.

Legislators should be appealed to by all physicians in Indiana to pass legislation creating a permanent fund for this surplus as it is money paid to the State Board by physicians in taking their examination for license and no money is appropriated for the use of the Board out of state funds.

The following report of the Special Reference Committee on Publicity was made to the House of Delegates Friday, September 30:

#### REPORT OF COMMITTEE ON PUBLICITY TO THE HOUSE OF DELEGATES, FRIDAY, SEPTEMBER 30

"To the House of Delegates:

"The committee on publicity, to which was referred the report of the Bureau of Publicity, submits the following report:

"We commend the committee for its very excellent report, as published in the JOURNAL. We congratulate the committee on the monumental work it has performed in the four years of its existence.

"The report of the work of the Bureau, as presented to the Indiana State Health Council, and as later distributed to the County Societies and to the secretaries of all state societies, is of the greatest credit to our Association.

"The warnings as to the activity of the various 'Health Faddists', now so numerous throughout the country, have proved very timely.

"The work of the committee in the promotion of periodic health examinations has been productive of much good.

"The weekly release of matters pertaining to general health topics is proving ever more popular, and we believe this work to be one of the outstanding accomplishments of the committee.

"The financial phase of the report would indicate that the Association is getting a vast amount of general good at the expenditure of a very limited amount of money.

"Your committee recommends the adoption of the report, together with the supplemental report.

E. M. SHANKLIN, Chairman, Lake County.

M. G. EREHART, Huntington County.

D. L. MCAULIFFE, Jennings County.

A. D. SWEET, Morgan County.

G. C. COLGLAZIER, Orange County."

The release on Infantile Paralysis was read, corrected and approved for publication Monday, October 17.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole October 17, 1927.

WM. N. WISHARD, M. D.,  
Chairman.

THOS. A. HENDRICKS,  
Secretary.



## FLOYD COUNTY MEDICAL SOCIETY

October 14, 1927.

The Floyd County Medical Society met in monthly meeting in Library Hall at New Albany, with a good attendance. After roll call, reading of minutes and regular routine of business, Dr. Glenn Spurling, of Louisville, the essayist, was introduced. He read a paper on, and discussed the "Pituitary Gland and its Disorders." He stated that for a long time the function, uses and structure of this gland were not understood that we now know that it has quite an influence on the growth and development of the body, and when disordered changes the character and disposition of the individual. The most serious disorder, known at the present time, is adenoma. He said that there was no known drug, medicine or serum, that had any influence or curative effect, but he hoped some day there would be a serum perfected that would act on disorders of the pituitary gland, the same as insulin acts in diabetes. At present the only known remedy is surgery, of which he mentioned a number of methods. Following operation, the patient is greatly benefitted, and at times entirely relieved of his distressing symptoms and condition.

A number of questions were asked Dr. Spurling, all were satisfactorily answered and explained, thus closing another profitable and interesting meeting.

Respectfully submitted,

P. H. SCHOEN, M. D.,  
Secretary.

## MADISON COUNTY MEDICAL SOCIETY

October 20, 1927.

The Madison County Medical Society held its October meeting on Tuesday evening, October 18, at the Grand Hotel in Anderson. Fifty-seven members and guests were present to do honor to Dr. and Mrs. F. W. Cregor, of Indianapolis. Dr. Cregor is president of the Indiana State Medical Association for 1927, and Mrs. Cregor has been elected to serve until next September as president of the Woman's Auxiliary to the State Medical Association. The management of the hotel served an excellent dinner at 6:30 and following this the wives of twenty-five physicians who were present were taken to the residence of Dr. M. A. Austin and there completed the organization of a county unit to the Ladies' Auxiliary.

The physicians present at the dinner having provided a number of interesting skin cases, these were examined and discussed in detail by Dr. Cregor. Particularly interesting was a trophic ulcer of eighteen months duration on the foot of a patient suffering with arthritis deformans; a case of probable carcinoma of the mouth secondary to leucoplakia; a case of generalized psoriasis, for which an elaborate course of treatment was recommended, but unfortunately everything that had been suggested had been tried out for over two years, with nothing but temporary relief, so that the possibilities of iron, arsenic, salicylic acid, chrysarobin, x-ray and other light therapy seems to have been exhausted; two cases of seborrhoeac eczema and one of eczema in a child brought out some interesting discussion; three other cases of doubtful ancestry and possibilities, that had been treated for weeks were diagnosed as scabies by Dr. Cregor. The meeting was of such interest that it was nearly 10 p. m. before it adjourned to go to the home of Dr. Austin for some late refreshments.

The ladies at their meeting, after listening to Mrs. Cregor's explanation of the aims of the organization, organized with the following officers: Mrs. M. A. Austin, president; Mrs. A. D. Earhart, secretary, Mrs. R. D. Hunt, of Pendleton, vice-president, and Mrs. A. W. Collins, treasurer. Each lady was required to introduce herself to those present and give mention of any special attainments she had achieved. Mrs. John Armington was voted to have attained the highest place of honor

as she was able to say that she was the mother of seven children. Mrs. Cregor was known to be a musician of rare skill, and most graciously gave a series of five piano numbers, and before each number, gave the composer's interpretation of its moods and themes, or rather the interpretation of the composer's mood when he wrote it. One lady present stated the impossibility of interpreting the mood of some of the compositions now being given publicity. Mrs. Cregor's music was sincerely appreciated by all those present.

The physicians and their wives enjoyed a social hour until nearly eleven, and it was suggested that these mixed meetings could be continued to a better understanding and a closer fellowship of all the profession. Mrs. I. N. Trent, councilor for the Eighth District Ladies Auxiliary of Muncie, and Mrs. U. G. Poland were present to further the work of getting a unit in every county in the district.

Respectfully submitted,

M. A. AUSTIN, Secretary.

## ELEVENTH COUNCILOR DISTRICT MEDICAL ASSOCIATION

October 22, 1927.

The Eleventh Councilor District Medical Association held its thirty-eighth meeting at Delphi, October 22, 1927, with Dr. J. H. Reed, Logansport, presiding and with sixty-one members present.

Dr. Edwin Kime of Indianapolis gave a very practical address on the subject of "Physical Therapy." This subject was also discussed by Dr. R. C. Johnston of Huntington, and Dr. F. S. Cuthbert, of Kokomo.

Dr. Ferry read a splendid and practical paper on the subject of "Influence of Heredity on Disease."

Dr. Charles Bayer who was to present the subject of "Some Clinical Manifestations of Syphilis" could not be at the meeting on account of the recent death of his father. Dr. George Bond very graciously came to our rescue and presented a most helpful address on the subject of "Goiter."

During the business session, Dr. Ira E. Perry of North Manchester was elected Councilor to succeed Dr. C. S. Black of Warren who has been a most faithful Councilor for a number of years.

During the six o'clock dinner at the Presbyterian church, Mrs. Frank W. Cregor, of Indianapolis, state president of the Ladies Auxiliary, presented the subject of the Auxiliary to the Association and ladies present. On motion of Dr. C. H. McCully, of Logansport, those present voted in favor of having a Ladies Auxiliary in our district.

Miami county was chosen as our next meeting place and the meeting will most likely be held in Peru in May, 1928.

Very respectfully,

O. G. BRUBAKER, M. D.,  
Secretary.

## TRUTH ABOUT MEDICINES

## NEW AND NONOFFICIAL REMEDIES

ACETARSONE-ABBOTT.—A brand of acetarson-N. N. R. For a discussion of the actions, uses and dosage of acetarson, see New and Nonofficial Remedies, 1927, p. 83. This product is supplied in substance and in 0.25 Gm. tablets. Abbott Laboratories, North Chicago.

ERYSIPELAS STREPTOCOCCUS ANTITOXIN (CONCENTRATED)—MULFORD.—An erysipelas streptococcus antitoxin (New and Nonofficial Remedies, 1927, p. 337) prepared by injecting horses intradermally with strains of hemolytic streptococci isolated by H. Amoss from human cases of erysipelas lesions, bleeding the horses and when test bleedings show the serum to have reached the desired potency, separating the serum, sterilizing it, and preserving by the addition of 0.35 percent of phenol. The product is then concentrated by a process which



preserves both the antitoxic and antibacterial properties claimed to be in the original serum. The product is marketed in packages of one 20 cc. syringe. H. K. Mulford Co., Philadelphia.

**CHOLERA BACTERIN (CHOLERA VACCINE).**—This cholera vaccine (New and Nonofficial Remedies, 1927, p. 358) is also marketed in packages of one 20 cc. vial containing 1,000 million killed cholera vibrios per cc. H. K. Mulford Co., Philadelphia.—(*Jour. A. M. A.*, September 10, 1927, p. 883).

**IODOXYBENZOATES.**—Iodoxybenzoic acid resembles salicylic acid, chemically differing in that the hydroxyl group of the latter has been replaced by an iodoxy group. The known actions of the salts of iodoxybenzoic acid, as developed by investigators, led up to its clinical application by Young and Youmans in the treatment of arthritis. The investigators, in their introduction of the substance, used the sodium salt or ammonium salt prepared extemporaneously; later, they recommended the use of ammonium iodoxybenzoate. The salts of iodoxybenzoic acid are indicated chiefly in arthritis. They are reported to be preferably administered intravenously; however, for cases in which the drug cannot be given intravenously, oral administration and administration by high enema have been employed and found effective.

**AMIODOXYL BENZOATE.**—Ammonium O-iodoxybenzoate—The ammonium salt of 2-iodoxybenzoic acid. The latter differs from orthohydroxybenzoic acid (salicylic acid) in that the hydroxy group is replaced by the iodoxy group. It contains 42.7 percent of iodine. For a discussion of the actions and uses, see the preceding article, "Iodoxybenzoates."

**AMIODOXYL BENZOATE-ABBOTT.**—A brand of amiodoxyl benzoate—N. N. R. Abbott Laboratories, North Chicago.

**CAPSULES EPHEDRINE HYDROCHLORIDE-SWAN-MYERS,** 0.05 Gm.—Each capsule contains Ephedrine Hydrochloride—Swan-Myers (*Jour. A. M. A.*, April 16, 1927, p. 1235) 0.05 Gm. Swan-Myers Co., Indianapolis.

**EPHEDRINE SULPHATE-ABBOTT.**—A brand of ephedrine sulphate—N. N. R. For a discussion of the actions, uses and dosage of ephedrine sulphate, see *Jour. A. M. A.*, March 19, 1927, p. 925. Abbott Laboratories, North Chicago.—(*Jour. A. M. A.*, September 24, 1927, p. 1061).

### PROPAGANDA FOR REFORM

**ARTIFICIAL RIPENING OF FRUITS BY ETHYLENE.**—While the use of ethylene as a means of ripening fruit is of growing commercial importance the health phases have not yet been thoroughly considered. Certain fruits and vegetables are recommended by physicians largely because of their vitamin content; whether or not this is altered by ethylene has not been determined. Possibly, also, the fruits and vegetables may be picked earlier than is the practice today, thus shortening the period of irradiation by the sun. Physicians may well watch the development of this form of food enterprise; perhaps the time may come when certain everyday foodstuffs will be purchased on the basis of vitamin units. In the meanwhile, the use of vitamin-containing products in as near a "naturally ripened" condition as possible should be encouraged when used for prophylaxis against avitaminosis.—(*Jour. A. M. A.*, September 3, 1927, p. 792).

**TREATMENT OF PERNICIOUS ANEMIA.**—Minot and his co-workers report good results in the treatment of pernicious anemia by means of a diet composed especially of foods rich in complete proteins and iron—particularly liver—and containing an abundance of fruits and fresh vegetables and relatively low in fat. Koessler and his associates believe that in some cases, at least, the phenomena accompanying pernicious anemia are the result of long continued deficiency in vitamin A and possibly also in vitamins B and C and propose the treatment of pernicious anemia with a high caloric diet rich in vitamins. Therefore, Minot and Koessler would prescribe an adequate general diet, including a large quantity of liver and kidney. Minot and his co-workers would re-

duce the fats whereas Koessler and his associates declare that butter, cream, milk and cod liver oil should be partaken of in large amounts. Macht reports that the blood serum of patients with pernicious anemia contains a toxin, and that this blood serum can be detoxified by irradiation with ultraviolet rays. Furthermore, he found that the effect of ultraviolet rays could be increased by introducing into the serum to be treated dyes which act as sensitizers. Since liver is the storehouse for blood pigments, some of these pigments may help increase the effectiveness of light and thus some of the good effects of liver diet may be connected with the liver pigments that are administered.—(*Jour. A. M. A.*, September 3, 1927, p. 793).

**PHOSPHOBION NOT ACCEPTABLE FOR N. N. R.**—The Council on Pharmacy and Chemistry reports that Phosphobion, manufactured by Dr. Theodor Koenig, Munich, Germany (Carl F. Lauber, Philadelphia, distributor), are pills, each stated to contain zinc phosphide, 0.0025 Gm., and iron glycerophosphate, 0.03 Gm. According to the advertising, Phosphobion represents a new treatment for sleeplessness. It is claimed that sleeplessness is caused by a deficiency of phosphorus in the organism and that the phosphorus in Phosphobion has the power of supplying this deficiency. No evidence is offered in favor of the theories on which the claimed action of Phosphobion is based, nor convincing evidence in favor of its claimed action. The Council found Phosphobion unacceptable for New and Nonofficial Remedies because it is an unscientific mixture of drugs marketed under a nondescriptive name with claims that are not supported by acceptable evidence and in a way to lead to its ill-advised use by the laity.—(*Jour. A. M. A.*, September 3, 1927, p. 809).

**DIGITALIZATION.**—The term "digitalization" was coined to signify the full pharmacologic action of the drug to the limit of safety. Laboratorial and clinical investigations have developed the digitalization amount of digitalis to be, for a 150-pound (68 Kg.) adult weight, a minimum of 22 1/2 grains (1.45 Gm.) and a maximum of 33 grains (2.2 Gm.). Half the minimum dose may be given at once and then 2 or 3 grains (0.13 to 0.2 Gm.) every six hours, or the other half of the minimum dose may be given on the second day. If the patient needs more digitalis for digitalization, the amount is gradually increased by 2 or 3 grains, perhaps every six hours, until symptoms of digitalization appear. Digitalization should not be attempted if the patient has previously been taking digitalis. The dosage advised must of course be greatly modified with frail, underweight persons. An overweight person, when that weight is largely due to fat, must not be given doses according to his weight. The condition of the patient must also be taken into account. Digitalization means digitalis poisoning. Such poisoning should not be inaugurated except by a careful determination of the exact condition of a patient to be treated. The general practitioner should not thoughtlessly digitalize his patient unless he has hospital or other facilities for determining the exact condition of his heart and his excretory ability.—(*Jour. A. M. A.*, September 10, 1927, p. 884).

**THE STANDARD LABORATORIES FIASCO.**—About thirteen years ago a concern known as the Truax Laboratories was operating in Chicago. Its method was to sell to dispensing physicians individual packages containing stock prescriptions. When the physician had spent \$100 with the Truax Laboratories, he received a "profit-sharing debenture of \$25." Later the name of the concern was changed to "Standard Laboratories, Inc." and the methods of doing business were also changed. The Standard Laboratories, Inc., got dispensing physicians to deposit \$100 with it, which was to be "taken out" in drugs. When the doctor had bought \$100 worth of drugs he was issued a "\$25 debenture profit-sharing certificate" that was worth nothing until 30,000 of them had been issued, at which time it would be accepted as stock in the company. In 1919, when the Standard Laboratories wished to advertise in *The Journal of the*



*American Medical Association*, it was told that its methods were not such as would commend themselves to the ethical conscience of the profession. It was pointed out that the Principles of Medical Ethics states that "it is unprofessional \* \* \* to accept rebates on prescriptions." Patently, the physician who held stock in the Standard Laboratories or who shared in its earnings was, in effect, accepting a rebate every time he prescribed its products. Present interest in this matter is stimulated by a small news item to the effect that Standard Laboratories, Inc., had just filed a voluntary petition in bankruptcy in the United States District Court.—(*Jour. A. M. A.*, September 10, 1927, p. 886).

**AGO-CHOLAN TABLETS.**—The statements made by E. Bilhuber, Inc., regarding the composition of Ago-Cholan are contradictory and indefinite. An advertising card sent out during 1926 gives "strontium cholo-salicylate" as a synonym. An advertisement published the same year declares that "chemically it is strontium-cholosalicylate to which is added a small quantity of phenolphthaleindiacetate. \* \* \*" A circular received in 1925 gives the following "composition" "Ago-Cholan contains as its active principle the combined cholic and salicylic acid salts of strontium (2 grains in each tablet) and a small quantity of phenolphthalein-diacetate (0.2 grain)." From the latter statement one may conclude that the "strontium cholosalicylate" is nothing more than a mixture of the cholic and salicylic acid salts of strontium in unstated proportions. Available books on therapeutics do not refer to the use of phenolphthalein-diacetate. E. Bilhuber, Inc., has not requested an examination of the product by the Council on Pharmacy and Chemistry, and so far the Council has not examined the product or the claims that are made for it.—(*Jour. A. M. A.*, September 10, 1927, p. 901).

**THE ADMINISTRATION OF CALCIUM SALTS.**—The intravenous and subcutaneous administration of calcium are attended with dangers or discomfitures; therefore, the possibilities of the oral route call for careful consideration. A survey of the literature on the absorption of calcium as it may be reflected in a change in the blood concentration of the element might leave one unconvinced of the efficacy of administering calcium compounds by mouth. Many clinicians have accordingly abandoned the practice. More recent studies give evidence, however, that with due attention to the conditions of administration it is possible to elevate the serum calcium concentration by the oral route of calcium supply. Experiments indicated that the optimal dose of calcium lactate is 5 Gm. and that the drug must be given in aqueous solutions when the digestive tract is comparatively empty; that is, either before breakfast or several hours after food has been consumed. Larger doses prevent optimal absorption.—(*Jour. A. M. A.*, September 17, 1927, p. 968).

**GELOBARIN NOT ACCEPTABLE FOR N. N. R.**—The Council on Pharmacy and Chemistry reports that Gelobarin is the trademarked name under which the Powers-Weightman-Rosengarten Company markets a mixture of barium sulphate and water, containing approximately 40 percent of barium sulphate. The preparation is proposed for use in radiologic examinations. The Council found Gelobarin unacceptable for New and Nonofficial Remedies because it is an unoriginal product that is offered under a proprietary, nondescriptive name.—(*Jour. A. M. A.*, September 17, 1927, p. 984).

**GONOCOCCUS IMMUNOGEN, GONOCOCCUS IMMUNOGEN COMBINED, STREPTOCOCCUS IMMUNOGEN, STREPTOCOCCUS IMMUNOGEN COMBINED, PERTUSSIS IMMUNOGEN COMBINED, AND PNEUMOCOCCUS IMMUNOGEN COMBINED NOT ACCEPTABLE FOR N. N. R.**—The Council on Pharmacy and Chemistry reports that Immunogen is the name applied by Parke, Davis & Co. to bacterial antigen products free or nearly free from bacterial cells and toxin. The firm requested the Council to consider a number (twelve) of these products in 1924. The Council decided to consider eligible for acceptance those simple immunogens in the case of which similar bacterial vaccines stood accepted. Regarding the "mixed" immuno-

gens which had been presented, the firm was informed that adequate evidence for the value of these preparations was lacking, but that any new evidence for their therapeutic value would be considered. The firm presented evidence which permitted the acceptance of two of the simple immunogens. In view of the inquiries received concerning the advertising claims made for immunogens, Parke, Davis & Co. was informed that the Council desired to take definite action in regard to those which had not been made acceptable. The firm was requested to send the advertising for the, as yet unaccepted, immunogens that were being marketed together with any further information which would aid in determining their acceptability for inclusion in New and Nonofficial Remedies. On the basis of the available evidence the Council denied admission of the gonococcus and streptococcus immunogens to New and Nonofficial Remedies because no simple vaccines representing these organisms stand accepted; the "combined" immunogens (Gonococcus Immunogen Combined, Streptococcus Immunogen Combined, Pertussis Immunogen Combined, Pneumococcus Immunogen Combined) are held unacceptable for lack of adequate evidence of their therapeutic value.—(*Jour. A. M. A.*, September 17, 1927, p. 984).

**METHENAMINE.**—Methenamine is the name adopted by the U. S. Pharmacopeia, Tenth Revision (which became official a year and a half ago), for Hexamethylenetetramine, described in the previous Pharmacopeia as Hexamethylenamine.—(*Jour. A. M. A.*, September 17, 1927, p. 987).

**YEAST.**—Yeast is rich in vitamin B. This is the only vitamin which it contains in important quantity as far as is known at present. According to New and Nonofficial Remedies, 1927, yeast has been used (a) in the past as a bactericide in the treatment of superficial infections, but this use of yeast has been practically abandoned; (b) as a source of vitamin B, for which yeast has been widely extolled; but, under usual conditions, the vitamin B requirement can be met by customary foods; (c) as a laxative, but only in case it does not cause intestinal distention; (d) in the past, as an internal remedy for furuncles and acne, but it is doubtful whether the benefit is in excess of the laxative effect; (e) as a stimulator of leukocytosis, but its efficacy in this respect is doubtful. The yeast obtained in grocery stores is essentially "brewers' yeast." It may be obtained either in semisolid form or in the form rendered solid by the addition of absorbent material.—(*Jour. A. M. A.*, September 27, 1927, p. 1080).

## BOOK REVIEWS

**MANAGEMENT OF THE SICK INFANT.** By Langley Porter, B. S., M. D., M. R. C. S. (Eng.) L. R. C. P. (London), professor of clinical pediatrics, University of California Medical School, etc., and William E. Carter, M. D., Instructor in pediatrics, University of California Medical School, San Francisco. Third revised edition, illustrated. Cloth. Price \$8.50. The C. V. Mosby Company, St. Louis, 1927.

Many physicians seem to have the idea that the sick infant can be treated and managed much the same as the adult is treated and managed. However, as the author of this textbook says, the human infant presents many peculiarities as to function and structure and these are such that when sickness overtakes the baby the management of its case demands many departures from ordinary methods of treatment that are quite appropriate when the physician has to deal with older patients. Thus, aside from the fact that the infant is more or less helpless, we must consider many factors, such as the unstable digestion and metabolism, the inefficiency of the infant's thermo-regulating apparatus, the undeveloped state of the nervous system, the vulnerability to the commoner infections, especially those of the respiratory tract, the accentuation of physical discomforts of illness, due to inability of the infant to change his position or to call attention to excessive covering, tight clothing or inappro-



nutritional problems. All of these subjects and more have been discussed in a very interesting and instructive way by the author. This third edition has been revised to bring it up to date and make it even more practical as a reference book for both student and practitioner. Nearly 75 illustrations help to elucidate the text.

**MODERN MEDICINE; ITS THEORY AND PRACTICE.** In original contributions by American and foreign authors. Edited by Sir William Osler, Bart., M. D., F. R. S., late Regius Professor of Medicine in Oxford University, England; Honorary Professor of Medicine in the Johns Hopkins University, Baltimore; formerly Professor of Clinical Medicine in the University of Pennsylvania, Philadelphia, and of the Institute of Medicine in McGill University, Montreal, Canada. Third edition, thoroughly revised, re-edited by Thomas McCrae, M. D., professor of Medicine in the Jefferson Medical College, Philadelphia; Fellow of the Royal College of Physicians, London; formerly Associate Professor of Medicine, the Johns Hopkins University. Assisted by Elmer H. Funk, M. D., Assistant Professor of Medicine, Jefferson Medical College, Philadelphia. Volume 1—Bacterial Diseases—Non-Bacterial Fungus Infections—The Mycoses. Illustrated, Cloth, pp. 845. Price \$9.00. Lea and Febiger, Philadelphia and New York. 1925.

The profession is greatly indebted to Professor McCrae for carrying on the revision of this masterpiece system after the death of the original editor. Much was to be done in view of the tremendous advance in medical knowledge during the twelve years elapsing since the publication of the first volume of the second edition. And such advances are faithfully set forth at their true worth in this new edition which preserves that outstanding charm of all of Osler's writings, viz., conservatism based on a careful survey of well-summarized facts.

While the general arrangement of volume I remains largely the same yet much new material must needs have been added in view of such outstanding work as has been accomplished in some of the infections, as for instance, the Dicks' in scarlet fever, and Krause in tuberculosis pathology. While in the therapy of tuberculosis Brown yields a point in favor of tuberculin treatment, he remains ultra-conservative upon the value of heliotherapy in pure pulmonary tuberculosis. Little space is accorded serum treatment of acute poliomyelitis. A word is said in favor of the vaccine treatment of whooping cough but in the Roentgen therapy of this disease unfortunately the number of milliamperes has been omitted. This latter is probably a typographical error and of those there occur, throughout the volumes reviewed, enough to become somewhat annoying.

Volume II, Diseases of Doubtful Etiology—Diseases caused by Protozoa, Spirochetes, and Animal Parasites, Diseases due to Physical and Organic Agents, Deficiency Diseases. Pp. 891. Price \$9.00.

Prophylactic bedding, the presence of irritating discharges, lack of ability to indicate thirst, and the correct solution of

In view of the more recent work on the etiology of measles and the apparent discovery of its specific organism, this disease will in the next edition of this work, find a place in the first volume instead of the second. One of the most interesting discussions in this volume is the excellent one on syphilis revised by Lewis A. Connor. Very favorable mention is made concerning the increased popularity of the Kolmer modification of the Wassermann test, and emphasis is placed upon the early detection of the *Treponema pallidum* by the dark-field illumination method, even before the blood has had the opportunity of showing a positive Wassermann; since at this stage intensive abortive treatment stands some chance of success. The author places distinctively less reliance on the luetin test than the Wassermann. In the treatment of the disease, the fact is becoming more certainly established each year that while none of the

four remedies is definitely specific by itself yet each has its own place in the therapy of this malignant disease. The intramuscular method for mercury seems to be favored and the author states that there is a growing conviction among syphilologists that the mouth administration of mercury has no place in the modern intensive treatment of syphilis. Since 1922 bismuth has gained a favorable place in the therapy of syphilis and particularly in those cases that have not responded to thorough treatment by mercury and arsenic. Slight preference is given to salvarsan over neosalvarsan and potassium iodid comes in for its deserved place in the therapeutic armamentarium of this obstinate disease.

With increased industry there must needs occur an increase in occupational diseases such as those due to physical and chemical agents; likewise is there an increasing knowledge of the effects of organic agents, food poisoning, food infections, etc. The volume closes with a rather full discussion of deficiency diseases.

Volume III, Diseases of Metabolism—Diseases of the Digestive System. pp. 1052. 1926. Price, \$9.00.

This volume opens with an interesting discussion of the general problem of metabolism by Du Bois, followed by a very satisfactory but condensed consideration of diabetes mellitus and insipidus by Fletcher; naturally the introduction of insulin into the therapy of diabetes mellitus has greatly altered the text on that phase of the disease. Quite complete treatment of the subjects of diseases of the oesophagus, stomach, intestines, pancreas, etc., is followed by a similar one on the liver, gall bladder and biliary ducts, revised by Lyon who discusses rather freely his method of non-surgical drainage of the biliary tract; the peritoneum by Rolliston; and splanchnoptosis, visceroptosis, enteroptosis, Glenard's disease by Thomas R. Brown.

**A MANUAL OF PHARMACOLOGY.** A Manual of Pharmacology and its Application to Therapeutics and Toxicology. By Thorald Sollmann, M.D., Professor of Pharmacology and *Materia Medica* in the School of Medicine of Western Reserve University, Cleveland. Third Edition; entirely reset. 1184 pages. Philadelphia and London; W. B. Saunders Company, 1926. Cloth, \$7.50 net.

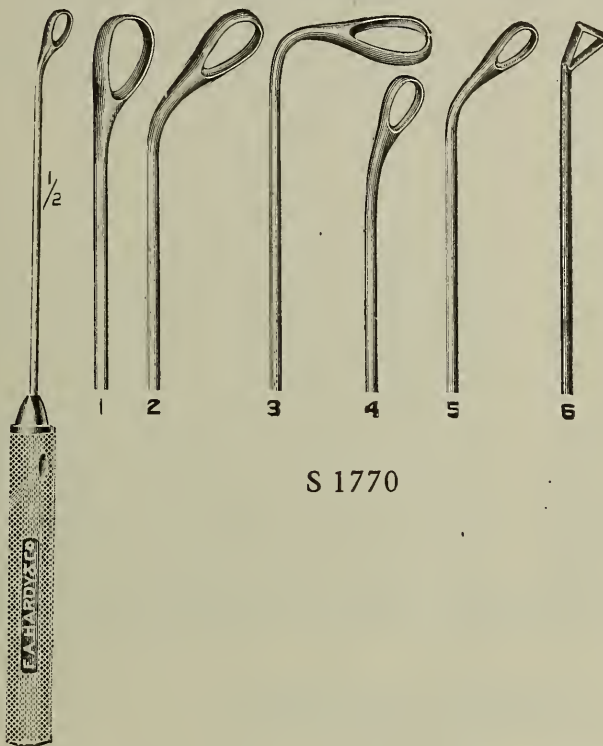
That this work is a classic and a storehouse of information, there is no doubt. Published first in 1917 it is now in its third revised edition and has been reprinted three times. It is almost incredible that so much information can be given in a work of 1184 pages. It should be an invaluable addition to every physician's office. This book has been thoroughly revised to accord with the new edition of the U. S. Pharmacopeia. The book gives an outline of the present conception of drugs from the practical point of view. The really useful drugs and methods of treatment are gone into thoroughly while the less important are shortly dealt with. New drugs like insulin, para-thyroid and other hormones, the new anæsthetic ethylene, and the chemotherapy of the arsphenamines and other arsenic preparations are gone into thoroughly and well. The physiology and anatomy of the autonomic system and its reactions to drugs is amazingly well done. Vitamines, especially the antirachitic vitamins of cod liver oil and the effect of ultraviolet radiation are discussed in a clear, concise manner. Alcohol is given twenty-three pages and its value as food and medicine is most admirably discussed. In the appendix is given a profuse bibliography, a check list of poisonous properties of drugs and a table of dosage. Throughout the book dosages are given in both apothecaries and metric system. This should have been carried out at least for the present decade in the appendix dose table where only the metric dosage is given.

**PHYSICIANS OF THE MAYO CLINIC AND MAYO FOUNDATION.** A series of six hundred thirty-five biographical sketches with six hundred eleven portraits and in-

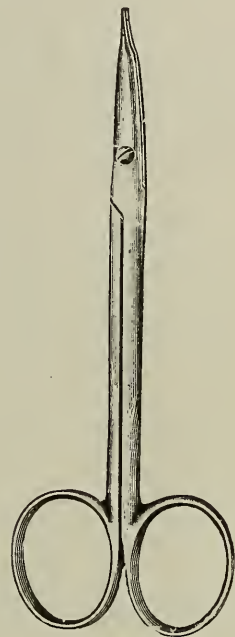
(Continued on adv p xx)

# A FEW SURGICAL INSTRUMENTS OF THE HIGHEST GRADE

QUALITY, WORKMANSHIP AND DESIGN



S 1770



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## BOOK REVIEWS

(Continued from Page 450)

cluding complete and accurate data concerning the professional life of each physician prior to January 1, 1926. Octavo volume of five hundred seventy-eight pages. Philadelphia and London: W. B. Saunders Company, 1927. Cloth, \$7.00.

1926 COLLECTED PAPERS OF THE MAYO CLINIC AND THE MAYO FOUNDATION, Rochester, Minnesota. Octavo of 1,329 pages, with illustrations. Philadelphia and London: W. B. Saunders Company, 1927. Cloth, \$13.00 net.

These two publications from the Mayo Clinic will receive careful attention from the wide circle of medical men who are interested in the professional work at Rochester.

The volume entitled "Physicians of the Mayo Clinic" is simply a presentation of the data concerning the professional life of each physician who, prior to January 1, 1926, had been officially connected with the Mayo Clinic or the Mayo Foundation for a period of one year or more.

As in previous volumes of Collected Papers, the material for this one has been selected to suit the needs of the general surgeon and the general physician. Of course, no review can be attempted of a work of this character. One hundred and eighty-nine topics, covering almost the entire field of medicine and surgery, are discussed. No medical library is complete without this volume.

SURGICAL DISEASES OF THE GALL-BLADDER AND PANCREAS AND THEIR TREATMENT. By Moses Behrend, A. M., M. D., F. A. C. S. Attending Surgeon to the Jewish and Mt. Sinai and Northern Liberties Hospitals; Consulting Surgeon to the Hebrew Orphan's Home, the Jewish Maternity Hospital, and Jewish Seaside Home, Atlantic City; Instructor in Anatomy

in the Jefferson Medical College. Philadelphia. F. A. Davis Company. Price, \$4.00.

This book of 278 pages is a very good presentation of the subject by a surgeon of large experience. The illustrations are splendid, the type large and the subject matter terse and to the point. Under the subject of anatomy, the important topic of variations in the ducts receives major consideration. This subject is demonstrated by forty-six full page illustrations. The description of the physiology and pathology of these organs is adequate. For cholecystography the author advises the use of the tetrabromophenolphthalein, but at present the bromine salt has been displaced by the iodine salt. Behrend states that the medical treatment of gall-bladder disease has been a failure and he performs cholecystectomy in practically every case of infected gall-bladder. In empyema of gall-bladder he teaches that one should wait until all the symptoms have subsided, that there must be no fever, no tenderness and that the pulse must be of good quality and not too rapid. The subject of diseases and treatment of the pancreas is too much abbreviated to be of any great value.

## ACUTE PANCREATITIS FOLLOWED BY DIABETES

LOUIS M. WARFIELD, Milwaukee (*Journal A. M. A.*, Aug. 27, 1927), states that the literature contains only recent reference to cases of diabetes following attacks of pancreatitis. The commonly reported acute hemorrhagic pancreatitis is usually such a severe disease that the patient dies within a few days. Sugar is apparently not found in the urine in such cases. There are, however, a few cases in which there does not seem to be any doubt that in a perfectly well person diabetes has followed directly on an attack of pancreatitis which was not severe enough to produce death. Four cases are reported by Warfield. Two of these were preceded by influenza. Two apparently occurred as primary acute pancreatitis, one being of the hemorrhagic form with fat necrosis.

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### ORIGINAL ARTICLES

#### TREATMENT OF COMMON BONE INJURIES.\*

EDWIN W. RYERSON, M. D.  
CHICAGO, ILLINOIS

The vast majority of the common fractures are treated by the general practitioner, and they should be so treated, because the ordinary fractures, with the exception of fracture of the neck of the femur, are not difficult to reduce, are not difficult to treat, and are capable of excellent results if the general practitioner understands as he should the value of a few simple principles. It is becoming the fashion to say that absolute bony apposition of fractured bones is not necessary. It may not be necessary in many instances but you will all agree that absolute apposition of broken bones is highly desirable. It is not always easy, it is sometimes extremely difficult, and in a few cases it is impossible to attain complete bony apposition after fracture; but our endeavor should be first of all to produce bony apposition. Why? Because our bones, especially our long bones, through countless generations have become so shaped and adapted to the uses for which they are called upon that we cannot lightly put aside the architecture, or the structure of the bony skeleton. We must in all cases come just as near as we can to getting the original form of the bone, and it is true that in most cases the damage to the soft parts is not very serious and will be recovered very much more readily than serious mis-alignment or shortening, and it is no particular credit to the medical profession that many of us assume that restoration of shape of a broken bone is not very necessary. That is a low ideal. We should escape from it as far as we can. We should make it our duty to see that bones are placed in as nearly normal position as is possible, or as is wise. It may not be wise in some cases and it may not be necessary to bring bones into perfect apposition, but so far as we are wisely able to do that it should be done.

The function of the hand and foot is of great importance. The function of the long bones and

joints is of great importance, and if it comes to a question of sacrificing either function or perfect alignment we should naturally swing the balance to the side of function. But in some cases both good function and good alignment can be attained if we know how to do it.

Let us consider some of the simple, ordinary fractures, taking children for example. The most common fracture in children is probably that of the clavicle, the collar bone. The same fall produces that which produces an equally common fracture in adults—the Colles' fracture of the radius. A fall upon the shoulder or hand will produce in the adult a Colles' fracture; in a child it will much more frequently produce a fracture of the collar bone. It is no longer sufficient to bind the child's arm to the side with an old fashioned Velpeau bandage. In some cases this gives good results, but it usually results in a bending downward of the outer half of the clavicle, which is not desirable. A simple cross made of two light, thin boards about five inches wide, well padded, put behind the child's back, with strips of webbing attached which can be put around the shoulders to hold the child's shoulders back into this padded cross, is comfortable and very efficient. It does not give a perfect result because it does not entirely control the drooping of the outer part of the shoulder, but it gives good results and is a method that can well be considered standardized. Anyone can make such a cross out of boards and put a couple of nails in the back to fasten the shoulder straps to—it is not difficult. It is much easier than to put on a Velpeau bandage, which does not give as good results.

Next in children is fracture of the middle of the femur, a transverse fracture. These fractures are not easy to handle. In many cases they require open operation. In the first place it is not easy by traction, even with a well applied Buck's extension, to pull down this broken bone into place. Why? Because usually the broken end of the femur is drawn through some of the layers of the muscle and it is not possible in some of these cases by the most well-intentioned and expert manipulation to get the femur ends in line. I am a reasonably good manipulator of

\*Stenographic report of discourse presented at the Indianapolis session of the Indiana State Medical Association, September, 1927.



broken femurs, but I can recall at least four cases where two or three attempts under complete ether anaesthesia failed entirely to reduce this fracture. A fracture of that kind should be cut down upon in practically all cases where a good man has tried to reduce the fracture and has been unsuccessful. In children the operation is not difficult, it is not particularly dangerous, but it should be done in a good hospital by a competent, clean surgeon.

The most common fracture in adults is Colles' fracture of the radius, which nearly always includes displacement of the lower end of the ulna. These fractures are almost invariably treated by the general men, and well treated, too; but it is simply appalling to see how many cases of simple Colles' fracture get bad results. Why? In the first place, men rather hesitate to give an anaesthetic in case of a Colles' fracture. It is much easier to give a sudden pull and try to reduce the fracture, and after we have done that, put it in splints and explain to the patient that it has been a bad fracture, that the result will not be perfect, that there may be some deformity and disability. We should not shield ourselves behind any such statement as that. It is always possible to reduce a Colles' fracture completely. I have failed many times myself, and I have no doubt that many of you have had the same experience; but it can be done and it should be done under a general anaesthetic, and as soon after the accident as possible. It is never wise to wait very long before reducing a Colles' fracture. The silver fork deformity frequently has to be much increased before it can be completely reduced. After it has been reduced it usually stays put fairly well, but many times it does not. It has to be splinted for a while at least, and I am not in favor of the very simple methods of splinting. We read articles in the journals from time to time that all that is necessary is to put a little roller bandage underneath the fracture, and after operation a bandage around it. That is not wise. The very multiplicity of forms of retention of a Colles' fracture is in itself proof that no one method is always satisfactory. In general, when you have reduced it a simple board splint a little wider than the forearm and going nearly to the line of the palm called the heart line which represents the metatarsal phalangeal articulation, is all that is necessary. It is wise to put a little cotton padding under the shaft of the radius, and a little over the place where the silver fork deformity existed so as to prevent further displacement. And now comes the important question in the treatment of Colles' fracture—after you have reduced it and put on the splint. You must remember that the function of the fingers is most important. The function of the wrist joint is not quite so important, but the function of the fingers must be preserved; consequently, have a splint that goes over the palm of the hand

to this heart line (or headline, I do not remember which). There are two lines close together, and if you stop just short of those magic lines you will gain immensely in the result to the patient. Encourage the patient to use the fingers and thumb from the beginning. Never, never, in a case of Colles' fracture, put on a splint that goes to the end of the fingers. We have seen countless people with stiff fingers because some well meaning man put on a long splint to the end of the fingers and kept it on for six or seven weeks. I recall a very talented piano player whose hand was absolutely ruined because the surgeon put on a long splint to the end of the fingers. I recall many other cases, unfortunately, some of my own years ago before I learned not to carry the splint to the end of the fingers. The patient frequently asks to have the splint carried to the end of the fingers because he is more comfortable, but it should not be done. Within two weeks the splint should be removed daily or every other day and a little motion made, with the physician's hand holding the site of the fracture—just a little motion of the wrist begun. In three weeks it is wise to discontinue the splint, and if you will follow this method of treatment you will not damage anyone. It is rather appalling to us when we stop to think how many people we have damaged in our attempt to heal a broken bone. I have damaged a good many, but I am very careful not to cause any more damage than I can help.

The next most important fracture in adults is Pott's fracture of the lower end of the tibia and the fibula a couple of inches above the tip, a deformity occurring with the foot in extreme outward rotation. This is another fracture where we sometimes hesitate to give an anaesthetic, but where we should never hesitate to give one unless there is distinct contraindication in the condition of the patient. In Pott's fracture the foot should be forcibly manipulated until it is turned into the opposite position quite distinctly, so there is a varus position of the foot rather than a valgus. The whole foot must be put into the varus position in order to hold it properly. Here another factor enters which is of great importance. Ordinarily the astragalus, which is the keystone bone of the foot, becomes displaced from its notch. The fibula has been broken, the tip end of the inner malleolus has been broken, and the foot has been pushed too far out of its socket. That is a deformity which sometimes is not recognized, and after a couple of attempts at manipulation we are shocked and surprised to find that although the foot has straightened considerably the astragalus is still too far to the outer side. That should be corrected. With the foot on the edge of a table the bone should be driven into place with a mallet until the astragalus comes back under the articular surface of the tibia. Pott's fractures cannot be freed from the retaining apparatus as early as a Colles' fracture. Patients should not

be allowed to walk soon after reduction of a Pott's fracture. Why? Because frequently before the bones have united properly the astragalus may be forced outward into a bad position, so it is wise for five or six weeks to keep the apparatus on, whether you use splints or a plaster of Paris cast. The plaster of Paris cast is the simplest and cheapest means of holding fractures in position. Sometimes I doubt very much whether it is the best means. Why? Because a plaster of Paris cast keeps away the sunlight, it keeps away the air, it is dirty. It is liable to be uncomfortable, it is liable to cause sores unless carefully applied; but the chief reason is that bone atrophy is produced much more rapidly inside of a plaster of Paris cast than it is where the leg or arm can be exposed to sunlight and air. It does not seem to me that it is the most advisable method of treating fractured bones, and as I grow older and see more fractures I am gradually getting away from the plaster of Paris cast in the treatment of fractures as much as possible.

In many cases we can use an apparatus in fractures of the long bone of arm or leg—make a Thomas splint and treat these fractures outdoors where sunlight can be used, and in some cases active or passive motion can be better instituted than with a plaster of Paris cast.

In fracture of the shaft of the femur the plaster cast is very inefficient. We pull down the fractured femur by traction apparatus and we apply beautiful long spicas of plaster of Paris from the toes to the axilla, the bones showing apposition, and we are astonished when two or three weeks later we send the patient down to the x-ray room to have a second picture taken to find that there is an over-lapping of an inch and a half or two inches. This can happen so easily, because the plaster of Paris cast can slide uphill on the patient, and it does slide uphill a very long way in many cases. It is one of the most dangerous ways of treating a fracture of the shaft of the tibia or femur that I know. I am very much afraid to put on a plaster of Paris cast in fracture of the femur, and I do not do it any more. I can recall fifteen or twenty cases in the last few years where I have been asked to see people who have had fracture of the femur, perfectly reduced, but a few weeks later when an x-ray was taken it was discovered there was a great deal of over-riding which would not have occurred if a Thomas splint or a Buck's extension had been used to take care of the fracture.

In every discussion of fractures we seem to range ourselves in two factions. On one side stand the men who believe in open operation for the reduction of fractures, and I presume that our distinguished English colleague, Sir Arbuthnot Lane, was directly responsible for the publication of the open method. In his hands the results are invariably excellent. He, with his technique and

in his own hospital, can attain results which cannot probably be equalled anywhere else, although Dr. Sherman, of Pittsburgh, has developed his technique to such a point that he cuts down on many fractures where most of us would hesitate, and screws them together with Sherman plates and has practically no infection. But those of us who look ourselves in the face and study our records are becoming less and less enthusiastic about the use of metallic plates and screws. It is easy, it is simple, it is almost dramatic to pull down bones into place and free them from surrounding impinging tissue, rapidly screw on plates and put them in a cast—it is fascinating. I was perfectly fascinated with Lane's work when I first saw it, but I am not able to secure anything like his results. Too many plates cause suppuration—not the plates, but the fault of my technique—and it has been my misfortune to see a high percentage of suppuration following this open operation. I have taken out a lot of plates and screws put in by other men; I have taken out a good many plates and screws I have put in myself. I have damaged a great many people by putting in metallic fixation, but every year I see a few cases where I cannot think of any better method of retaining the fracture, and in those cases I have not much hesitation in putting in plates and screws. Some of them have suppurred, and some have been lucky. It is my personal belief that metallic fixation rather inhibits bony callus. I think it can be proven that the presence of plates and screws do prevent the bone from throwing out callus as it should.

What other means can be used? Albee, of New York, believes that almost all of these cases should be operated on by his bone inlay method, and I have used it many times with satisfaction, although I have to admit that we do not obtain very solid fixation. You cannot fasten the inlay so it will give mechanically sound fixation. The leg must be handled with the greatest delicacy, and the apparatus has to be continued for a long time.

Other methods could be mentioned. For a number of years I have believed that the intramedullary transplant of beef bone affords better fixation than an Albee inlay. It is remarkably free from danger, is well tolerated by the patient, and produces a very small percentage of later infection. I hold no brief for the intramedullary peg, except that in some cases of transverse fracture of the femur it has worked very well. Someone asks, "Suppose you get infection from this peg, what happens then?" What happens, of course, is an enormous amount of grief for you, and you undoubtedly will have a case of osteomyelitis before the case is finished, and the only thing to do is to cut down and take out a section of the bone, sufficient to enable you to pull the beef bone out. After a long time it heals, but there



is a great deal of grief in it, although no more than where a wound becomes infected where a Lane plate is used. But the open operation for fractures is full of grief unless we have all the mechanical and surgical appliances and accessories which one needs for such operations.

I do not believe that open operative fracture work is particularly adapted to the use of the general practitioner. I think closed bone surgery is the natural field for the average general practitioner who must take care of his fracture cases. He cannot ship every fracture case to a large center where there is a larger hospital with more apparatus and accessories. He must treat his own fractures so far as he can, and the sole criterion for the treatment of fractures by the general practitioner is in his own soul and head. Can he do it well enough? If he can, he should do it. If he feels that the individual case is something that he should not touch, he should say so and get someone who can do it. I often ask myself what I would do if I were an honest, industrious, capable man working in a small place without all the things I have to help me in my work, and yet I have to say that some of the best results I have seen in some of the most complicated fractures have come from small places throughout the country where there was a good, square, honest man who was doing the best he could; he could not afford to do anything extra, he was not too radical, but he treated his patient with what after all is the keynote of any treatment of fractures, and that is plain, American common sense. If you have good common sense you can take care of most fractures properly; if you do not have good common sense you had better get somebody else to do your fracture work.

Two fractures are always to be considered operative fractures—fracture of the olecranon, unless it is very well treated with the arm in a straight position, is always operative, and it makes no difference whether you use kangaroo tendon or chromic catgut, you can pull the fragment down, fasten it, and if you keep the arm straight for three or four weeks you will get good results. Fracture of the patella is not a highly difficult or specialized operation; it can be done by any good general surgeon or any general practitioner who understands surgery. It makes little difference whether you encircle the patella with a wire or sew it up with chromic catgut, you will get good results if your work is clean.

Fracture of both bones of the forearm in the adult is frequently operative, and it is in those cases where the fracture is nearly transverse that the small beef bone peg helps out a good deal. They are not so apt to cause suppuration as the Lane plate and they do well.

Then there is the spiral fracture of the tibia. It is very difficult to reduce properly, and keep reduced by any means except operation. The result usually in those cases is that the tibia

is offset by the time you are all through, and that puts out of line the weight-bearing centers of the leg, and the patient usually has a bad knee if the tibia is out of line. This fracture very often should be operated upon.

Fractures of the neck of the femur are the most dangerous of all except those of the spine or the skull. They are most difficult to take care of and the results on the whole are unsatisfactory after any kind of treatment. Fracture of the neck of the femur especially in elderly persons, is a very grave injury. My friend, Dr. Whitman, who devised the best closed method of treatment for fracture of the head of the femur, told me he had never had a patient die after his method of treatment had been used. I do not believe he misrepresented the facts but I have had a good many patients die after fracture of the neck of the femur where I followed his directions to the letter and did everything I could to get the patients well. It is a dangerous fracture. It may be that before many years we shall be operating on fractures of the neck of the femur early in the game as a routine—I am not sure.

It is not necessary to have all the complicated apparatus one would like to reduce these fractures but you do have to have plaster of Paris and know how to put on long spicas. Pull the leg down until it is the same length as the other one, then rotate it inward, then abduct the leg as far as you can, then abduct the leg as far as the other one can be abducted, then apply a plaster of Paris spica, well padded, from the axilla to the toes, with the foot turned in and the leg abducted away out; then as soon as possible get the patient mobilized so he can sit on the edge of the bed, roll over and turn about, and a little later get him crutches, if he is not too old or too fat, or too feeble. The results by that method are many times excellent, and we do it in most cases. It stands today as the best and safest treatment for these fractures of the neck of the femur. On the other hand we have to realize that there is a definite proportion of non-union in this treatment, in the hands of everybody but Dr. Whitman, and that we should strive for a better method which will be almost 100 per cent perfect, and it is possible that before many years we shall all recognize that fracture of the neck of the femur is as much a surgical problem as acute appendicitis. I have done a good many open operations for fracture of the neck of the femur. Some of them have had good results; one or two have had suppuration and bad results. But I believe when our technique is improved, and when we study these cases more, we will operate a much larger percentage than we are doing today. The fact that many of them are very old people and therefore bad operative risks should militate against operation in cases of that class, but we see so many young healthy adults with fracture of the neck of the femur in these days

of automobiles, that I am beginning to feel that I have not operated enough of them.

The question of the periosteum is a thing we are all interested in, but to this day nobody knows whether the periosteum forms bone or not; nobody knows whether we ought to preserve the periosteum carefully in cases of fracture on which we operate; nobody knows whether in old, united fractures we should preserve the periosteum. I think, however, that it is an extremely important and valuable structure, and so far as I can I spare the periosteum in whatever operation I do, because I believe the results are better where the periosteum is respected. If you will take my advice you will be very respectful towards the periosteum.

I will not speak of other fractures except fracture of the spine. Many of the painful backs that we see where there has been a not very severe injury, but where months afterwards these painful attacks continue, are found by careful x-ray examination to be fractures of the spine. Ordinarily, of course, they are compression fractures of the body of the vertebra—usually not more than one—and it is treated as a sprained back, or for months and years as neuralgia of the spine or a neurosis of some kind. It is remarkable how many people can have fracture of the body of a vertebra from a most simple injury. A strong, healthy girl of nineteen came into my office last spring. She had slipped as she was walking down some steps and sat down. She was not heavy or fat and there was no reason to suspect fracture of the spine, but she had pain in her back which had kept up for six months. I sent her to the laboratory for an x-ray picture, and there was the second lumbar vertebra crushed down in front to half its normal width—a fracture that would have been recognized early had an x-ray picture been taken. Most of these people need nothing but rest in bed for a few months; perhaps a Taylor back rest or a plaster cast for a few months, and most of them will get well. But in other cases where there are untoward symptoms there is a problem which is by no means solved. I have seen a large number of spinal injuries with cord symptoms, and I have reached this conclusion, that so far I have not harmed anyone by doing a laminectomy, and I think I have saved a few people to useful lives that otherwise would not have been saved and if I should go out on the street today and be hit by an automobile and receive a fracture of the spine, I should want somebody to operate on me just as soon as they could get me on the table. I do not want to wait for a lot of oedema and hemorrhage to occur in cord cases. Many cases fail to get well after cord compression from oedema and hemorrhage, and that condition will certainly not be made worse by a carefully performed laminectomy. I have done many under local anaesthesia with no shock or subsequent suffering. But I do not hold with a very respectable

number of excellent men—neurologists and surgeons and others, who think a case should not be subjected to laminectomy until after weeks or months or years. I believe if you are going to be able to do the patient with fracture of the spine any good, when he has cord symptoms, you must do it within the first day or so, and preferably within the first few hours, and when we make that a routine we shall save a lot of people. I have now fifteen or twenty poor people—it almost makes me shed tears to see them—lying perfectly helpless, absolutely unable to move—some of them have lived ten or fifteen years completely paralyzed. When I see these people I feel it is better to take all the chances of danger, and damage and death—many of them would be better dead—than to adopt the policy of watchful waiting to see what is going to turn up. I think cases of cord injury from spinal damage should have a laminectomy done by a competent person, and if a competent person is not around, by a plumber or gasfitter if you can get him to do it. I have had plenty of war on my hands since I have been advocating that principle, but the more I look at these cases the more do I feel that we shall only be able to solve the problem when everybody gets up and says something about it.

#### DISCUSSION

Question: How do you regard artificial impaction of the neck of the femur, and where there is spontaneous impaction, how much advantage is that?

Question: What is your experience with dislocated vertebrae—not fractured, but dislocated?

DR. RYERSON: In regard to artificial impaction in fracture of the neck of the femur, probably the gentleman would also include fracture of the os calcis. Dr. Cotton of Boston and I have amusing arguments every time we get together because I do not believe in artificial impaction at all. I think when we have fracture of the neck of the femur the neck is short any way and why hammer it and make it shorter still. You can get a good union without jamming two bones together and shortening an already short neck of the femur. In the foot, in fracture of the os calcis, it is a good method, and I am also in favor of putting a screw clamp on and screwing it down until you reduce the size of the bone.

In regard to dislocation of the vertebrae, there are some dislocations that occur without much damage, without much injury, and those are the unilateral subluxations of the cervical vertebrae, which may occur as in the case of a child whose schoolmate ran behind her and pulled her back, pulling her head acutely backwards. The x-ray picture showed a unilateral subluxation of one of the little facets on the left side of the spine. Walton told us how to fix them by flexing them to the same side, then the other way, then giving them a twist, which in the case of a number of others has succeeded in reducing this subluxation.



Occasionally there is a slipping of the fifth lumbar vertebra forward upon the sacrum, spondylolisthesis. These cases can be fastened by an Albee operation. The chiropractors claim to find a great many vertebral dislocations which do not actually exist. The dorsal and lumbar vertebræ cannot be dislocated by any minor injury. It takes a great deal of injury and a severe impact to cause dislocation in those regions, and in practically every case of true dislocation there is also a fracture of the articular facets, but this occurs only with great violence, and when it does occur it should be operated upon by a competent surgeon and not by any chiropractic manipulators.

### THE TREATMENT OF HYPERTHYROIDISM\*

CLEON A. NAFE, M.D.  
INDIANAPOLIS

Concerning the treatment of hyperthyroidism there is general uniformity of opinion that the one desired result is lessening of the thyroid secretions. There is, however, some differences of opinion as to the methods by which that end can best be obtained.

A considerable amount of literature concerning thyroid disease has appeared in the recent medical writings. Scarcely a medical journal appears without it containing an article concerning the thyroid gland. There has been considerable honest difference of opinion concerning the proper method of treating hyperthyroidism, with the result that we are quite confused at times concerning exactly what to do with a patient suffering with this condition.

It became very apparent to me during my seven years at the Indianapolis City Hospital that many different views were held by the various members of the visiting staff concerning just how hyperthyroidism should be treated. As a result, it was only natural that I should be confused myself. It was primarily for the purpose of becoming more convinced myself of the proper way to handle cases of hyperthyroidism, that I have made this study and written this paper. I hope it will promote additional thought on this subject.

It has been my pleasure during the last year, to visit for a short time the Mayo Clinic and also Dr. Crile's clinic, where undoubtedly more thyroid cases are seen than at any other two clinics in the world. I have compared their methods and ideas and have received reports from many of the larger goiter clinics in the United States concerning their ideas as to how patients suffering from hyperthyroidism should be treated. From this literature and from my observations, I have attempted to summarize the most generally accepted views on this subject, hoping to avoid the enthusiasm that is often shown by various men for their particular method of treatment. I believe we will be as near correct as possible, if we

accept the verdict of the majority of the physicians doing a large amount of work in this field. I shall not attempt to discuss the diagnosis or classifications of goiter, but will limit this paper to a consideration of the treatment of hyperthyroidism.

*Recent discoveries concerning thyroid disease.* During the last twenty years, the medical profession has had brought to its attention some bits of information concerning the thyroid gland, which as yet have not been completely evaluated by the profession. As a result it is quite natural that there have existed many conflicting views concerning the thyroid gland. The conclusions of Kimball and Marine, the discovery of Plummer, and the therapeutic use of x-ray and radium have given the profession much reason for scientific study.

The startling conclusions of Kimball and Marine following the administration of iodine in small amounts to several thousand school children in Akron, Ohio, are well known. They concluded that iodine in small amounts given to children would prevent goiter, and would cure one-third of all simple goiters. They further stated that in small amounts it would do no harm. The present wide spread use of iodine and iodinated salt as a result of this work and the publicity given to it is amazing. Michigan in 1924 adopted a state law stating that all salt sold in the state should contain a certain amount of iodine. In Rochester, New York, iodine was added to the city water supply. This, however, proved very expensive and impractical and was therefore discontinued. Many commercial houses have reaped a rich harvest from the advertisement and sale of iodinated salt. The value or harm of this wave of enthusiasm cannot be correctly measured as yet. Many valuable ideas however, are beginning to crystallize concerning its merit.

In 1923 Plummer gave a preliminary report stating that small amounts of iodine, when given in the form of compound solution of iodine for a short period to patients suffering with hyperthyroidism caused by true hyperplasia and not toxic adenomata, would cause a marked improvement of that patient, noted clinically and as determined by metabolism studies. This has led the profession generally into the unguarded use of iodine in the treatment of goiter, because its limitations then were not fully understood and many did not comprehend completely all that Plummer said.

The advent of x-ray therapy in this field is another element that has injected uncertainty into the treatment of hyperthyroidism. Like any new form of treatment, it promised much in this field until its value was measured. It has had, and still has some enthusiastic supporters. The work at the Massachusetts General Clinic by Means, Holmes and Richardson and by similarly constituted clinics have been of great value in estimating the value of this form of treatment.

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Inasmuch as these new views have recently been advanced, it is quite logical that extensive discussions should result with many differences of opinion. Only in that way will there result an ultimate proper conception of the merits of the various forms of therapy directed to the relief of hyperthyroidism. It is well that there are men who see a larger number of these patients, who can advise us as a result of their observations, as to the proper methods of treatment.

*Classification of hyperthyroidism.* Hyperthyroidism presents itself in two distinct clinical entities, adenomatous goiter with hyperthyroidism and exophthalmic goiter in which there is uniform hyperplasia of the secreting glandular portion of the thyroid gland. Dr. Crile is of the opinion that these two conditions are so closely related that they need not be differentiated for therapeutic purposes. He is of the opinion that the hyperthyroidism in case of adenomatous goiter is due to a distinct hyperplasia of the gland itself stimulated by the presence of the tumor. It is generally agreed by Mayo's and others, however, that we are dealing with two distinct entities. In adenomatous goiter the toxic substances are elaborated in the tumors and when these are removed the cause of the condition is eradicated. However, a different story exists in true exophthalmic goiter. There are many theories concerning its cause but I will not discuss them. It is agreed that in the changed disturbance of bodily activities the thyroid gland becomes hyperactive and the only way of attacking the condition is to break the chain by lessening the activity of the thyroid gland. Until we better understand the exact nature of the etiology of exophthalmic goiter, this will continue to be the method of attack. Since the etiology of these two types of hyperthyroidism are different, their treatment varies somewhat. It is well to remember, too, that toxic adenomata and true hyperplastic goiter may co-exist in the same patient, and it is not always a simple matter to differentiate between the two conditions.

Jackson, in his text on the thyroid gland, calls attention to another type of hyperthyroidism which he calls iodine hyperthyroidism. It occurs in patients from 30 to 50 years of age with adenomatous goiter who have been taking iodine for some time. It is becoming more frequent with the general use of iodine. The diagnosis depends upon the history of prolonged use of iodine, and these patients present some different symptoms. The treatment is practically the same as that of toxic adenomata, although the prognosis is poorer.

*Methods of treatment of hyperthyroidism.* The question then confronts us in a given case of hyperthyroidism—what form of therapy shall be instituted and how shall it be applied? This is the practical problem when the diagnosis is once made.

The methods of treatment generally can be grouped into three divisions—medical management, surgical treatment and radiation. Medical management includes the various forms of drug therapy; the removal of exciting causes such as foci of infection; lessening of emotional or mental strain and eliminating excessive physical strain. Surgical treatment includes all operative procedures on the thyroid gland whether it be polar ligations, lobectomy, subtotal thyroidectomy, or various injections. Radiation may be applied in the form of x-ray or radium.

Each form of therapy still has its ardent and enthusiastic supporters, but it is quite apparent now that the general trend is almost universally toward the surgical treatment. Radiation is still being used considerably, but its advocates are becoming less numerous and less enthusiastic. There are still those few who consider exophthalmic goiter a medical disease, and a very limited few, who treat adenomata medically. It is undoubtedly best that the internist, roentgenologist and surgeon continue to study these patients together and treat them together, until more statistics are available, and the etiology of exophthalmic goiter is determined. Each specialist should continue his work with an analytical attitude and mind open to reason and conviction. We should eventually agree on a method of procedure that offers the very best results to the patient suffering from this condition.

Marine has stated that in the literature the cure of hyperthyroidism has been credited to each of 239 drugs and other forms of treatment. From among all these opinions in favor of one or another of the medical therapeutic measures, the verdict in favor of physiological rest alone or combined with other measures, as the medical treatment par excellence is practically unanimous.

Of all the drugs that have been used in the treatment of exophthalmic goiter, only one has proved to be of any noticeable value and that is iodine in various forms. Quinine hydrobromide was advocated several years ago, but Means and Aub and others have stated that patients do just as well when at rest whether they take quinine hydrobromide or not. The drug probably has some sedative effect and that is all.

Iodine has been used in various forms for many years in the treatment of simple goiter with beneficial effects. It remained for Plummer to demonstrate its wonderful beneficial effects in hyperplastic goiter within the last few years, his preliminary report being given in 1923. He called attention to the remissions occurring in patients with toxic symptoms, when iodine was administered. Trousseau in 1863 achieved the same result when he erroneously gave tincture of iodine in place of tincture of digitalis to a patient with exophthalmic goiter. He did not successfully proceed with a more elaborate study of his discovery and therefore Plummer deserves



goiters in which he says "At the Massachusetts General Hospital we now feel that the most satisfactory way to treat exophthalmic goiter is to produce a remission in the hyperthyroidism by means of compound tincture of iodine as advised by Plummer and to do a subtotal thyroidectomy during this remission. This offers the most certain and most prompt cure. Our change in attitude is entirely due to the introduction of the use of the compound tincture of iodine. We still feel that x-ray is efficacious in about two-thirds of the cases, but our preference of a few years ago was based on the dangers incident to surgery. The use of iodine seems to have wiped out these dangers for the most part and to have made possible single stage operations instead of multiple ones and to have removed practically all of the objections to surgery."

These conclusions seem to me to be as fair as any that I know concerning the value of x-ray. They have a right to be more correct than those of the Mayo Clinic or Crile Clinic, where it is admitted that x-ray has not had a just trial as it should have. The roentgenologist at Crile's Clinic states that he has had favorable results in a few cases that were too sick for surgery, but in general he believes that surgery by a capable surgeon is more prompt, more certain and is no more hazardous than x-ray.

Goetsch says of x-ray that it can be no more good than a simple ligation in preparing a patient for thyroidectomy and is less certain and is more time consuming.

Terry objects to x-ray because he states that it is time consuming, uncertain, and may produce hypothyroidism in a patient with adenomata when a mistaken diagnosis has been made.

The exact value of x-ray therapy must still be determined but the conclusions of Means represent fairly well the views of the conservative group of roentgenologists. There is some merit in x-ray therapy, but since the advent of iodine and more scientific and less hazardous surgical procedures, x-ray and radium have become of less comparative value.

Of what value then is x-ray in the treatment of hyperthyroidism? It may be used in those patients who refuse operation or are in such a condition because of complications that surgery is too hazardous.

Also Grier states that good results may be obtained by treating intrathoracic hyperplastic or adenomatous goiters when there are pressure symptoms and operation would be hazardous. The radiation will diminish the size of the gland and make the subsequent operation simpler and less dangerous.

If Means' conclusions are correct it may be used preliminary to surgery to reduce the toxicity of adenomatous goiter, where iodine is of no value unlike it is in exophthalmic goiter.

Surgical treatment of hyperthyroidism has had its ups and downs but is now fairly generally recognized as the treatment of choice for exophthalmic goiter. It is almost universally utilized as the only available method of treatment for adenomatous goiter with hyperthyroidism.

The advent of the use of iodine as a preliminary method of treatment for exophthalmic goiter before thyroidectomy has so lowered the mortality following this operation that the objections and objectors to surgery have been considerably lessened.

Of exophthalmic goiter Lahey says "It is assumed that surgery now is accepted as the only curative procedure available in this condition."

*Surgery versus medical treatment.* The objections to surgery for exophthalmic goiter by medical men such as Bram and others can be briefly summarized as follows:

1. The risk of operation.
2. Hospital confinement.
3. Disfiguring scar.
4. Patients not cured by surgery.
5. Possibility of recurrence.

Jackson has summarized briefly some answers to these.

1. The risk of operation in large goiter clinics and in the hands of capable surgeons is now less than one per cent. The medical mortality is much higher than this. McCarrison claims that in a large number of cases collected for statistical study, death occurred in 11.8 per cent from Graves disease itself. Another thing to consider is the morbidity in case of those patients' treated medically. Many patients undergoing medical treatment survive one or more crisis only to suffer until death occurs from cardiac decompensation, extreme ulcerating exophthalmos, chronic passive congestion of the liver, nephritis, psychosis and so forth.

2. Hospital confinement for surgical treatment in the majority of large goiter institutions is less than two weeks. Jackson's average is six days. Others may average three weeks. Compared to this Kessel and Lieb hospitalized their patients for three months or longer for medical treatment. Bram advocates rest for sixteen hours a day for many months or a year, the time to be spent in pleasing occupations such as listening to music, reading light literature, or engaging in light games. This might be well for the wealthy capitalist but for the majority of people with this disease who have to work for a living, this type of treatment would be suicide. Working people must be returned to their occupation with a minimum loss of time. This is undoubtedly accomplished by surgical treatment.

3. The scar is very seldom objectionable when the skin is carefully closed. It is less unsightly than a goiter or the pigmentation due to x-ray or radium, exposures.

4. Concerning the end results Judd states that six years following operations for exophthalmic goiter on 100 patients studied, 65 per cent were cured and 13 per cent were materially benefited. He states that these patients were badly diseased when operated and he believes the results can be materially benefited by operating before so much damage has been done to other organs of the body. These statistics were secured, of course, before the advent of iodine as now used, and results now should be better than this. Jackson states that every patient operated on for exophthalmic goiter at the Jackson Clinic from January, 1922, to January, 1925, returned to his occupation within two months, except one who was so damaged previously by prolonged medical treatment that she died one year after thyroidectomy of myocardial weakness. Jackson may, of course, be a bit too enthusiastic.

5. Recurrences may develop in a small percentage even today. However the number has been reduced to less than two per cent in the majority of clinics. This improvement is the result of abandoning the old operations of lobectomy and enucleation and substituting bilateral resection of the gland. The use of iodine carefully administered following surgery will lessen the percentage of recurrences in the future it is thought.

*Standard surgical procedures.* The surgical procedures that are now practiced have become so well standardized by the larger clinics that they are familiar to all. I will only mention a few of the present tendencies which are as follows:

1. Injections of the gland by various solutions has been almost universally discontinued as a therapeutic measure.

2. Preliminary ligations have been greatly reduced since the advent of iodine as a preliminary method of treatment. Even Crile, who was the chief advocate of ligations and multiple operations, has found these procedures unnecessary in a large percentage of cases.

3. Bilateral resection of the thyroid gland leaving a portion of gland approximately the size of the patient's thumb is almost the universal practice. The old operations of lobectomy and enucleation of adenomata is more commonly practiced in Europe than here, although DeQuervain states that recurrences will occur in younger people and only advocated enucleation in patients past 50 years of age. Adenomata are practically always multiple in the thyroid gland and therefore bilateral resection is practised in an attempt to eliminate the adenomatous tissue and lessen the number of recurrences. However, a larger portion of the gland is left than in exophthalmic goiter. Adenomatous goiter is almost universally considered a surgical condition.

4. Local anesthesia with morphin and scopolamin has become by far the favorite anesthetic,

Crile still uses nitrous-oxide gas oxygen analgesia in conjunction with it, while Mayos occasionally supplement it with ethylene. Percy does practically all of his thyroids under local anesthesia, as does Jackson. Ether has lost its prominence as the anesthetic to be used. These surgeons claim a lower mortality with local anesthesia.

Local anesthesia has the distinct advantage of allowing the surgeon to know when he has cut a recurrent laryngeal nerve. On the other side he can then be extremely careful and avoid cutting the other nerve. Patients will recover the use of the larynx after one recurrent laryngeal nerve is cut, but not after both nerves have been cut.

5. Local anesthesia may be a block anesthesia or local infiltration, the latter being more generally used. Bundy of the Mayo Clinic advises blocking the third, fourth, and fifth cervical nerves, but even at that clinic Pemberton prefers local filtration and uses it.

6. As mentioned previously Lugol's solution as advised by Plummer is given almost universally before surgery in cases of exophthalmic goiter for approximately 10 days. Crile gives it for five or six days in cases of toxic adenomatous goiter also, although this is generally considered a poor procedure. In case there is a doubt concerning the type of hyperthyroidism, iodine may be given cautiously.

Iodine is also given immediately after thyroidectomy to prevent a crisis. It is also continued for a longer period of time to prevent a recurrence.

7. Most patients are digitalized before operation, although Plummer advises otherwise, unless there are definite cardiac indications for its use.

8. It is uniformly agreed that the best results in the treatment of hyperthyroidism can be obtained by the internist and surgeon working in close co-operation and harmony. It is important that proper medical treatment be instituted to see that the patient comes through the post-operative crisis and his strength must then be measured as he gradually goes back to work.

#### CONCLUSIONS

1. It has been the purpose of the paper to discuss the present views concerning the treatment of hyperthyroidism. That is a difficult task because opinions are fast changing.

2. Hyperthyroidism due to toxic adenomata has almost universally been considered a surgical disease. The present tendency now is distinctly toward surgical treatment in the case of exophthalmic goiter.

3. The discovery of iodine by Plummer as a preliminary to surgery has made the surgery of exophthalmic goiter comparatively simple and much safer and accounts for the present tendency to surgery.



4. Medical treatment for exophthalmic goiter except as an adjunct to surgery is losing its enthusiasts. Physiological rest is the best medical treatment. Iodine is not to be considered a satisfactory treatment for exophthalmic goiter over a long period of time.

5. Radiation has some value in the treatment of exophthalmic goiter and Means is of the opinion it benefits toxic adenomata. The conservative radiologists are, however, not so enthusiastic concerning its use as they were. The Massachusetts General Hospital group now recommend surgery. Radiation should be tried in inoperable cases and in those that refuse operation although there are some objections to its use.

6. Bilateral resection of the thyroid gland under local infiltration anesthesia supplemented if necessary with gas-oxygen anesthesia is the present day popular treatment for hyperthyroidism.

7. It is important that the roentgenologist, internist, and surgeon continue to work together in these cases with an open mind hoping to solve in the future some of the differences of opinion that now exist concerning the treatment of this condition.

#### SOME OBSERVATIONS ON X-RAY THERAPY\*

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This paper consists of personal observations and conclusions on x-ray therapy. I have not attempted a thorough going discussion of the subject. My purpose is to convince you that for many diseases x-ray therapy is the best, and often the only possible method of treatment.

At the outset I wish to allay the fear of x-ray treatment which some of you may have. There have been many bad results following its use, though most of these occurred while it was still in the experimental stage. The danger of bad results should not be minimized. Deep x-rays may light up latent foci of tuberculous or pyogenic infection, may cause a fatal anaemia, and may cause extensive destruction of the viscera; for example, degeneration of the heart muscle, atrophy of the kidneys, ulceration of the intestines, and fibrosis of the lungs, but these effects can be avoided. It is obvious that an apparatus capable of doing so much harm should be entrusted only to conservative and competent men. In such hands the treatment is safe. No patient whom I have referred for treatment has received a serious injury therefrom. I shall enumerate a number of diseases in which I have seen good results follow x-ray therapy.

##### 1. *Uterine Fibroids*

Numerous observers have established pretty definitely the indications and contra indications for x-ray treatment of uterine fibroids.

It is most successful when the tumors are small, and when the chief symptom is hemorrhage. It should not be used when the fibroid is very large, unless, on account of the general condition of the patient, it is the only treatment possible. In general it should not be used when the patient is under thirty-five years of age, when the diagnosis is in doubt, or when pelvic infection is present or suspected. The presence of uterine cancer should be excluded before advising radiation. The patient can safely be promised that the treatment will stop the hemorrhage, but statements in regard to the disappearance of the tumor should be guarded. However, I have seen some very large tumors almost disappear after radiation. The patient should always be warned that the effect on the hemorrhage will not take place for several weeks after treatment, and that she will probably bleed as much as usual at the next period.

I report the following from a number of similar cases.

A woman of 45 had had profuse hemorrhages at each menstrual period for several years. When admitted she was practically exsanguinated, her hemoglobin being 20 per cent. She had a small fibroid no larger than an orange in a freely movable uterus. There were no adnexal masses. Treatment consisted of a large transfusion of unmodified blood and radiation. In four weeks after admission she was back at her work as a telephone operator. She never menstruated after the treatment.

##### 2. *To Destroy or Decrease Ovarian Function.*

In certain cases of extremely profuse and painful menstruation, which have resisted all ordinary treatment, relief can be obtained by carefully graduated doses of x-rays. Sometimes fragments of ovarian tissue left after attempted removal of the ovaries cause pain and dysmenorrhoea. Patients so suffering can very easily be cured by radiation, thus doing away with the necessity for what may be a difficult and dangerous operation. The following case illustrates this point.

A woman of thirty had already undergone two pelvic operations, the last one at a well known clinic. She was suffering from intolerable pain at her menstrual periods. Pelvic examination showed a mass on the left side of the uterus, firmly fixed to the pelvic wall. The right ovary had been removed. Before I operated, I wondered why this mass—evidently an enlarged ovary—had not been removed by the previous operators. On opening the abdomen I learned why. It was deeply buried in the broad ligament and the sigmoid was densely adherent above it. I closed the abdomen, and had the ovary radiated. Cure was prompt, and pelvic examination a few months after treatment showed a marked decrease in the size of the mass.

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### 3. *Abdominal Metastases From Malignant Growths of the Testicle.*

A young man consulted me for an enormous abdominal tumor occupying most of the left side of his abdomen. It was retroperitoneal, because the descending colon could be demonstrated to be in front of it. The patient had had his left testicle removed about six months before for supposed tuberculosis. He had some hard, discrete glands in the groin. I removed one of these for microscopic examination, which showed a round cell, so-called embryonic type of cancer. Deep x-ray therapy caused the abdominal tumor to disappear very rapidly. The patient was soon able to resume his usual work. However, he died within a year after treatment, probably of generalized metastases.

I must state that in two other cases of a similar nature, no effect on the size of the abdominal tumor resulted from radiation. In these cases I was ignorant of the histology of the primary growth. In some genito-urinary clinics radiation is used before operation in the treatment of primary cancer of the testicle. It is possible to protect the healthy testicle from the rays.

### 4. *Certain Malignant Tumors of the Ovary.*

I operated upon a patient, aged 45 years, for an ovarian cyst about the size of a football and situated chiefly in the right side of her pelvis. On opening the abdomen I found that the cyst was occupied by a growth having about the consistency of thick and tough gelatin. This tissue had spread over the left wall of the pelvis and surrounded the iliac vessels. The tumor substance was poorly vascularized. I removed some of it for microscopic study and closed the abdomen. This was about two years ago. Under deep radiation the tumor disappeared, and the patient has remained apparently in good health ever since. This is a peculiarly fortunate result because myxo-sarcoma as a rule is not greatly benefited by radiation.

I have had treated a number of patients suffering from abdominal metastases of malignant ovarian cysts. The results have on the whole been disappointing, although the ascites disappeared in one patient who had abdominal paracentesis done at frequent intervals for two years.

### 4. *Round-Cell and Lympho-Sarcoma.*

The action of the x-rays on these tumors is so prompt and invariable as to be diagnostic. They should not be operated upon, or at most nothing more than a biopsy should be done to establish the diagnosis. But even this, as just stated, can be established by observing the effect on the tumor of radiation.

The following is a safe rule: Any subcutaneous tumor of sudden appearance and rapid growth, not an abscess, or a cyst, or a haematoma, should be treated by radiation. If the tumor disappears within a week or two the diagnosis of round-cell or lympho-sarcoma is reasonably cer-

tain. It may be added that a fatal outcome is also reasonably certain.

Nothing in medicine is more dramatic than the effect of radiation on these tumors. I will give an illustrative cause. A woman of twenty-one had suffered from attacks of suffocation for about two months. When first seen she had the most distressing dyspnea, inhaling with great effort and a marked stridor. Above her manubrium was a palpable tumor and the percussion note was dull over the manubrium and to each side. A plate of her thorax showed a large tumor of the thoracic inlet extending below the arch of the aorta and well out to each side. Radiation caused this tumor to disappear in a few days. The dyspnoea was completely relieved, but the patient lived only three months, death being due to metastases.

Round-cell and lympho-sarcoma, untreated or treated by any method known at present, are always fatal. So prompt is the disappearance of individual tumor masses following radiation that the attempt has been made to produce a radical cure by subjecting the patient's entire body to radiation. This attempt has been a failure because the dosage of x-rays required produces a fatal anaemia.

### 5. *Tuberculous Glands of the Neck.*

The surgical removal of tuberculous glands of the neck requires often a very extensive operation. The immediate danger is considerable, the scars produced are unsightly, and the prospect of cure is far from certain.

X-ray treatment is superior in every respect. It will cure after operation has failed. Operation on tuberculous glands should be limited to the aspiration of tuberculous abscesses, the drainage of the same when pyogenic infection has occurred, and to biopsy to establish the diagnosis. Failures of x-ray therapy are practically limited to patients with advanced pulmonary tuberculosis or very low resistance to the infection, in other words to patients who could not be operated upon.

### 6. *The Pain Caused by Spinal Metastases of Cancer.*

No pain is more prolonged and agonizing than that caused by cancer involving the dorsal roots of the spinal nerves. It can nearly always be completely relieved by deep x-ray therapy. In a series of six cases I have seen but one partial failure. One of my patients entered the hospital in pain so severe that the injection of half a grain of morphia afforded her only transient relief. Less than twenty-four hours after treatment she was completely free of pain. She required no more morphia till she died about six months later.

### 7. *Certain Inoperable Malignant Tumors.*

At exploratory laparotomy I found a large firmly fixed tumor replacing the right kidney and extending as far as the inferior vena cava. The capsule of the tumor was so tense that I feared to incise it to obtain a specimen of tissue. This tumor which was about six by eight by six inches



in size, decreased following radiation till it was no longer palpable. The patient, who was in considerable pain and unable to be up for more than short intervals, has been doing her own house-work for over a year and a half, and apparently is in good health.

On two patients with almost complete obstruction from cancer of the sigmoid, I did caecostomies and had the cancers treated by radiation. In both cases the obstruction was soon relieved as shown by the appearance of normal stools and closure of the caecostomy. The relief continued in one case for six months. The other patient is still alive and comfortable.

The time has come when we must recognize that operations on malignant growths, when complete extirpation is impossible, do more harm than good in most instances. Such operations are sometimes justifiable on aged patients, but seldom on patients under sixty. Most patients so afflicted should be treated by some form of radiation. The effect on a particular tumor cannot always be predicted with certainty, but is frequently highly satisfactory.

#### *General Discussion and Conclusions.*

The foregoing list by no means includes all the conditions benefited by x-ray therapy. As I stated in the beginning of this paper, I am not attempting a complete discussion of the subject. I have left out all consideration of the use of radium. This has a large field of its own, which I cannot here do more than mention. This includes all deep seated growths—e.g.—cancer of the cervix, tonsil, oesophagus, etc., where x-ray treatment is difficult or inefficient. When a large field is to be covered x-ray treatment is preferable to radium. As a palliative treatment for cancer of the breast I prefer radium to x-ray. This preference is based upon a fear of the effect of x-rays on the heart and lungs. Hartman and his co-workers at the Ford Hospital have shown that the heart muscle may be seriously damaged by radiation. However, x-ray workers insist that by proper dosage, proper direction and screening of the rays all harm can be prevented.

In conclusion permit me to say that no physician can afford to be ignorant of x-ray therapy. For the palliation treatment of cancer it is indispensable, and for several other diseases it is the best method of treatment. In competent hands it is now as safe as any treatment from which we expect a major effect. No field of medicine is developing in a more rapid or interesting manner.

#### DUODENAL ULCER AND ITS SEQUELAE\* (SURGICAL CLINIC)

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Case 1. A woman, 55 years of age, the mother of three children, the youngest of which is 22

years old. She came to the hospital complaining of weakness and extreme loss of weight. Her present condition dates back five years, the history running something like this: Gas in the abdomen, manifesting itself by attacks coming on three hours before one meal, or maybe about one hour after another meal. This was relieved by intake of food. These attacks were more noticeable in the springtime. This continued until about three years ago, when the weakness became more pronounced; she had severe indigestion with considerable bloating. Most of her trouble was one hour after the intake of food. At this time she noticed that treatment would regulate and control the acidosis and pain. Later on she noticed an area of soreness in the upper right abdomen, which was quite severe at times—painful on walking or riding. She had not up to this time lost any weight, her weight being 248 pounds.

Three years ago, about the time of the onset of soreness in the upper abdomen, with tenderness and muscular rigidity, she became jaundiced. She did not have any attacks that required morphine for relief of pain, only soreness, jaundice and nausea. The pain ran around to the back under the shoulder blade.

About one year ago she began to lose weight. At this time the soreness began to disappear in the upper abdomen; it was not tender any more. She became weak. Six months ago she began to vomit more frequently, and two months ago she vomited practically everything she took into her stomach. No soreness or pain, but this great loss of weight—110 pounds in one year. During this interim she was treated other places until she came to Dr. Hill, who sent her to the hospital. She was very weak, pulse irregular, she was emaciated—a case of starvation.

At the hospital her past history was found negative for disease of any consequence. She had typhoid many years ago, with an uneventful recovery; never had an x-ray or blood examination. Family history, mother died of something similar to what she was supposed to have.

Physical examination, blood pressure 90/140; heart negative; teeth all out; eyes react to light and accommodation; no tenderness in upper abdomen; no rigidity; vaginal tract negative; skin dry and sallow; some pitting about the ankles. Blood examination negative; blood Wassermann negative; urine negative.

One point I would like to make, and that is that the burden of responsibility in diagnosis, especially of the abdomen, rests with the man doing general practice. A number of years ago when I was with Dr. Rilus Eastman he said to me, "When you get out in practice, listen to the family doctor." It is not to the men attending this society, but to the men out in the hinterland, that this message should go, and I think medical societies and hospital staffs should draw these

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men in to give this diagnosis. There is no reason why patients of this sort should drift along without definite diagnosis until they are emaciated and down and out, and perhaps it is too late for anything to be done. I think the responsibility for these cases rests upon the men doing general medicine, and the glory for their recovery should go to the men doing general medicine, not to the fellow doing a little bit of general surgery.

The preoperative diagnosis of this case was gall stones. We always have in mind in the preoperative diagnosis, malignancy of the bowels or cancer of the outlet of the stomach. Up until two years after the onset of the attacks, at which time she had some acute upper abdominal infection, whether abdominal infection, cholecystitis, or what not, she had muscular rigidity and soreness, besides general stomach symptoms, as a referred pain in the shoulder. Perhaps it would be well at this time to differentiate between referred pain and muscular rigidity and soreness. They are two distinct things, especially in appendix trouble, or in gall bladder where an exudate comes in contact with the parietal peritoneum. We have two groups of referred pain. One is a visceral pain that comes through the stretching of the viscera or a stretching of the gall bladder, or a spasmodic contraction of the pylorus or the ileocecal valve—that is pain that is referred from the viscera and is a real pain; it is not a soreness as we think of it—a tenderness to touch. There you get your early pain in the appendix due to spasm of the appendix wall. It is through an uneven contraction of the voluntary muscles. It may be away from the seat of pathology. You never get muscular rigidity from stretching or trauma. That is a different reflex altogether and has to do with the sensory nerve of the stomach group. For illustration, in acute appendix you must have either contact with the inflamed appendix, contact with the inflamed intestines with spastic exudate from the omentum, or free toxic pus coming in contact with the anterior parietal peritoneum, before you get muscular rigidity.

In this case the diagnosis was gallstones—the woman was the right age, she had pain referred to the shoulder. We thought the pain must come from the diaphragm, since the diaphragm gets the same blood and nerve supply as the shoulder, and we get this pain referred to the shoulder. If this was a malignancy—we believe that in people of this age, unless it has some definite, well-defined clinical truth behind it, comes on out of a clear sky. It might have been ulcer, and we appreciate that one out of four cases of ulcer if allowed to go on become malignant. They come on out of a clear sky and are not diagnosed until there is perforation. This patient had upper abdomen infection for some time, and we thought of gallstones.

She came to the hospital for operation. Is it worth while to operate on these cases with great loss of weight and possible malignancy of the stomach? We think they are all operative unless they are past having anything done. If you have well defined malignancy of the pylorus you can give them some fairly good health and an easy death by a posterior gastroenterostomy under local anaesthesia. This case came to surgery under gas—local anaesthesia. The x-rays were negative; chest and heart negative; no deformity of the stomach; normal peristalsis; no deformity to suggest malignancy or ulcer. Stomach was entirely empty after six hours, and the intestinal tract gave no suggestion of pathology. At times this woman would notice what seemed like a large tumor in the abdomen, with a nervous crises, but after vomiting this would disappear.

At operation it was found the gall bladder was negative. The liver was striated, there were adhesions about the pylorus, and there was almost complete constriction of the pyloric orifice. There was no enlargement, but an annular constriction of the pylorus, an old ulcer scar. No evidence of malignancy in the liver or stomach. Following operation this woman came back to 170 pounds in a few weeks' time. She was dying of starvation from mechanical obstruction, due to an old scar of the duodenum.

I think we lay too much stress on the surgical end of surgery. I think the fellow doing the surgery is just a sort of technician engrafted on a good doctor. I think the day is coming when the men going out will make earlier diagnoses, and to me the general man is responsible and should get the glory, and should get the major portion of the fee for making this diagnosis. There is no reason why a patient should leave his home environment for diagnosis. It should be made at home. We think if this woman had had care early she would not have come to operative procedure at this time, because I do not believe many duodenal ulcers come to operation unless there is stricture or perforation.

The next case is a boy, 22 years of age; married; came to the hospital complaining of pain in the abdomen and shock. His present condition began 24 hours before entrance as severe, cutting pains throughout the upper abdomen followed by nausea. Salts and castor oil were given, and a quarter grain of morphine, but without relief. This continued throughout the night. He was nauseated, but did not vomit. The abdomen was very tight, but without diarrhoea. In the morning his temperature was going up. Pulse, 140; temperature, 103; white blood count, 25,000, and more or less shock. A diagnosis had been made by his family doctor of acute appendicitis.

Three or four years ago this man had had an x-ray which showed a duodenal ulcer. About three years ago duodenal ulcer was diagnosed by



a man at Dayton. He never had had a severe attack before. He arrived in some shock, but with a negative pulse rate, chest expansion limited on both sides to the costal margin; there was a scaphoid abdomen, hard and board-like down to the umbilicus, with lower abdomen distention. Rectal examination was not made. The diagnosis was a perforating duodenal ulcer.

This boy was taken to the surgery, and under gas local anaesthesia (which is what we use at Muncie) an upper abdomen incision was made. The belly was full of gas, bile and mucus, and there was a perforating duodenal ulcer on an anterior surface, as was diagnosed three years ago. This was closed with mattress sutures of chromic catgut covered with silk, and drainage put in by a stab wound. This is the fourth week and he has made a fairly good recovery.

Before I close I would like to say something as to the postoperative treatment. As to the surgical treatment, it seems to me it is simple—go in and get the major pathology and get out. But in the postoperative treatment of these cases of appendicitis or ulcer we use a Rehfuß tube all the time. The head of this boy's bed was elevated, he was given a quarter grain of morphine, and continuous hypodermoclysis was instituted and a Rehfuß tube was kept in place day and night. This boy, under proper medical regime, would not have come to perforation, and possibly would not have come to surgery.

The Mayo Clinic has found in 100 cases of doctors that obstruction of the pylorus ran twice as high percentage as in the general population, and that the cure of duodenal ulcer, with operative procedure without incision, in medical men who can regulate their diet, ran about 90 to 92 per cent.—an absolute clinical cure.

#### RADIUM TREATMENT IN NEOPLASMS OF UPPER AIR PASSAGES

G. Allen Robinson, New York (*Journal A. M. A.*, Sept. 3, 1927), discusses the use of radium in fibromas of the nasopharynx, polypoid ethmoiditis, rhinoscleroma and malignant tumors of the sinuses. Of eight patients with fibroma in the nasopharynx treated with radium, two were successfully operated on after two radium applications; five are clinically cured with radium alone, and one under treatment at the present time is improved. Experience in nearly forty cases of polypoid ethmoiditis has shown that headaches, chronic nasal discharge and asthmatic attacks have been relieved and that the sense of smell has returned. The interval between recurrences of polypi, as a result of the radium treatment, is lengthened. In three early cases of rhinoscleroma with the disease localized to the nasal cavities there has been a clinical disappearance of the neoplasm. In three advanced cases the nasal obstruction was relieved for from two to four years. Of seventeen patients with carcinoma of the antrum and accessory sinuses, three have remained clinically free from the disease for more than three years. Of fourteen patients with sarcoma of the antrum treated with radium, two are alive and have been well for five years, one for three years and two for two years.

#### RELATIONS OF PHYSICIAN TO PUBLIC HEALTH

Hugh S. Cumming, Washington, D. C. (*Journal A. M. A.*, July 2, 1927), discusses the past and present relationship of public health and the medical profession; the development of health organizations, and of the medical profession and public health activities. He points out that it will be impossible for any group to delimit the respective fields of the private practitioner and the public health official in specific terms appropriate to the whole country. The people as a whole appreciate the value of and, in a large part, the method for obtaining health. They are naturally more or less indifferent as to how this end shall be accomplished. The medical profession must appreciate this fact and aid in working out a solution. It is the privilege of the profession to cooperate with the public and its duly appointed representatives in the development of a satisfactory system, and it would be unfortunate to give the public at large any impression to the contrary. From time immemorial the medical profession has been regarded as the natural sponsor not only of individual but also of community health. Legal provisions relating to standards of medical education and privilege of the practice of medicine rest on this foundation. Whether this service in future shall

be rendered by the profession in cooperation with health authorities or be made incumbent on the legal health representatives must depend on the character of the service rendered by the profession. It should be the object of the organized profession to impress on each individual physician his responsibility in this matter.

#### MALNOURISHED CHILD

L. W. Sauer, Evanston, Ill. (*Journal A. M. A.*, Sept. 17, 1927), gives a brief outline of a simple, intensive, individual method of treatment for the malnourished child brought to the physician's office. It has been used successfully in several hundred instances during the last five years. The best and most permanent results have been obtained in malnourished school children with: (1) insufficient food or rest; (2) tuberculosis of the lymph glands, the pleura or the bones and joints; (3) anorexia, the result of a nervous environment; (4) goiter with or without increased metabolic rate; (5) secondary anemia. The method has not been used in underweight children with any disease of the heart, blood, urinary system or gastro-intestinal tract, including acidosis and diabetes, as such children usually require other special diets and treatments. An analysis of thirty consecutive underweight children, aged from 5 to 12 years, treated for three months by this "individual" method of intensive feeding reveals that: 1. Most of the patients fatigued easily, had poor posture and were anemic. 2. No child had been eating sufficient food; twenty-four had faulty food habits (improper food, eating between meals, especially sweets and iced foods or drinks). 3. Twenty-six had been having insufficient rest. 4. In sixteen the cutaneous tuberculin test was positive. These included eight patients with bronchial gland tuberculosis; three children with tuberculous pleurisy with effusion; two with bone tuberculosis, and one each with cervical glands and pulmonary tuberculosis. 5. All but two were above the average height for age; twenty were of the asthenic type. 6. The thyroid gland was visibly enlarged in nine; two of these had tachycardia and increased basal metabolic rates. 7. Three had active, tardy rickets. The results were gratifying in most instances; the few who failed to cooperate gained the least. Almost without exception, coincident with the weight increase there was marked improvement in the pathologic condition. The average gains for the thirty children here reported were: 5 pounds for the first month, 3 1/2 pounds for the second month, and 2.9 pounds for the third month, an average of more than 11 pounds for three months, or five times the average rate of gain.

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Devoted to the Interests of the Medical Profession of Indiana

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EDITORIALS

PROTECTING THE PHYSICIAN

We have supported the Council on Pharmacy and Chemistry of the American Medical Association ever since the establishment of that enterprise. Our reasons for giving this support are based upon the knowledge that the Council furnishes physicians a form of protection in the selection and use of various therapeutic agents that they cannot secure independently. We believe that occasionally the Council has been too ultra-technical in its findings and sometimes too exacting in its demands, though at no time is the practicing physician going to make any mistake if he follows the findings of the Council, whereas, he altogether too frequently is in error if he follows the advice and recommendations of pharmaceutical manufacturers, not a few of whom are guided in their opinions and recommendations by purely commercial reasons.

The work of the Council requires not only an enormous amount of work at a large expense borne by the American Medical Association, and the highest type of competency and accuracy in laboratory work, but an exhibition of most commendable nerve on the part of the Council in placing the stamp of approval or disapproval upon the various preparations that come before it for endorsement or rejection. The Council, in reality, is a clearing house where the wheat is separated from the chaff, and the verdict concerning therapeutic remedies, especially the newer ones that constantly are coming out, is based upon careful analysis of composition, and trustworthy tests of therapeutic effect. The information given by the Council is therefore of inestimable value to the medical profession, and we believe is not sufficiently appreciated by the rank and file among the physicians of this country. To the credit of the Council it should be said that the work is not confined purely to those therapeutic remedies that are offered to physicians for use, but applies to many of the nostrums and quack remedies sold directly to the public in the form of patent medicines or proprietaries. In fact, the sale of many well-advertised nostrums has been curtailed greatly or even stopped altogether through the public exposé of the general worthlessness of such products. So, all in all, despite our feeling that sometimes the Council is too exacting, and too technical in its findings, we believe that every practicing physi-

cian in the United States can better afford to endorse and be guided by the findings of the Council as an ultra-technical and ultra-radical body than he can afford to ignore the protection thus offered. No physician is going to make a mistake by prescribing Council approved products, but he can make a mistake by prescribing those remedies that have not been approved, and certainly those that have been condemned by the Council.

Aside from the virtue that certain proprietary remedies may possess and that have been recommended by the Council because of their therapeutic value and the honesty with which they are marketed, the Council frequently finds it necessary to point out to the medical profession the unfair margin of profit that manufacturers sometimes make upon such remedies. As an instance of this we call attention to a pamphlet prepared by the Council for distribution at the October convention of the American Hospital Association, held at Minneapolis, and physicians are asked to compare the relative prices of identical substances sold respectively under protected and non-protected names, and the wholesale druggists prices of November, 1926, are quoted. In one column is given the proprietary name with the price, and in another column is the non-proprietary name of the same thing, with its price. The list is as follows:

Proprietary		Non-Proprietary	
Phenacetin	\$.63 oz.	Acetphenetidin	.27 oz.
Aspirin Bayer	.85 oz.	Acetylsalicylic Acid	.15 oz.
Veronal	3.00 oz.	Barbital	.70 oz.
Atophan	2.75 oz.	Cinchophen	.60 oz.
Duotal	1.07 oz.	Guaiacol Carbonate	.30 oz.
Urotropin	.60 oz.	Hexamethylenamine	.17 oz.
Trional-Winthrop	1.90 oz.	Sulphonethylmethane	.46 oz.
Sulfonal-Winthrop	1.70 oz.	Sulphonemethane	.36 oz.
Diuretin	1.85 oz.	Theobromine Sodium Salicylate	.37 oz.
Aristol	1.80 oz.	Thymol Iodide	.72 oz.
Total	\$16.15	Total	\$4.10

The total cost of an ounce of each of these substances under a protected name is \$16.15.

The total cost of an ounce of each of these substances under an unprotected name is \$4.10.

*The cost of the proprietary name to the consumer is \$12.05!*

In this circular the Council also calls attention to some of the dangers that are prevalent in the use of certain chemicals or proprietary remedies that have not been approved. For instance, ethylene as used for anesthesia may prove very dangerous from the fact that carbon monoxide has been found in some of the preparations on the market, and carbon monoxide poisoning has been reported from the use of these preparations. On the other hand, there are brands of ethylene on the market that have been found by the A. M. A. chemical laboratory to be carbon monoxide free, and such preparations have been approved by the Council. Very naturally, it follows that physicians should use the Council approved preparations for anesthesia.



In connection with this subject of poisoning by anesthetics, it was the Council that called attention to the toxic effects following the use of local anesthetics, and has analyzed a report of forty-three deaths submitted to the committee for the study of the effects of local anesthetics. The outstanding points in the report are that: First, accidents from the use of local anesthetics are more frequent than supposed; second, accidents occur with the newer synthetic anesthetics as well as with the older ones; third, the reporting of such accidents to the permanent, confidential, professional committee, is a duty because the study of such information is the only means by which accidents may be reduced. It may be well to point out that the Council has not approved some of the local anesthetics that not only are sold to the medical profession but used by some physicians without due consideration of the effects.

A book called *New and Nonofficial Remedies* is published annually by the Council, and a copy of it should be on the desk of every practicing physician. This book describes accepted articles, and includes facts the physician and hospital attendant should have. It keeps the physicians and nurses up to date regarding the newest remedies. It advises the physician of products not worthy of his attention. It is useful to the physician or hospital buyer when he is importuned by the detail man to prescribe or to stock a new specialty. If a new remedy is not described in this book, ask why. The book is revised from time to time to bring it up to date, and a late copy will well repay the physician who buys it.

Finally, we desire to utter a plea for more general use of the Council and the information that it can give. Without the Council we still would be in the chaotic condition we were in twenty-five years ago when a very large percentage of the physicians of the country did not actually know what they were prescribing when they prescribed a new chemical or pharmaceutical mixture, for the reason that they were taking the information from manufacturers, many of whom were dishonest, others unintentionally misrepresenting their preparations and the therapeutic value of the same, and still others knowingly were crooked in that they exploited preparations which they knew to be without therapeutic value. At the present time some manufacturers have a wholesome fear of the Council, though perhaps all of the reputable manufacturers now understand and believe that approval of their products by the Council is of distinct advantage to them and in consequence they are co-operating with the Council in giving to the medical profession and public products that meet all the requirements of quality, honesty of manufacture, and propriety in marketing. We have reason to believe that occasionally the Council is ultratechnical in its

findings, and somewhat arbitrary in its ruling on trivial points, but, as heretofore stated, to err in that manner is far better than to err in the opposite direction, and the medical profession should be highly satisfied with the fact that it has established and supports an enterprise that is so strict in adherence to the profession's best interests.

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### HOSPITAL LIGHTING

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Within the last few years much attention has been given to the subject of lighting in our homes, factories and public buildings. Emphasis has been placed upon the question of securing an abundance of light and the avoidance of glare and reflection. Too much light is just as bad as too little light, and this is especially true in the use of electricity for lighting. Some people have an idea that electric bulbs of high candle power may be used satisfactorily for illuminating whereas a great amount of injury to the eyes may occur as a direct result of increasing the intensity of the light beyond the point of necessity and comfort. Then, again, too little attention is given to the subject of the direction of the light which should be from the side or behind, and to the presence of glare or reflection from smooth surfaces. If all of this is important for the person in health it is doubly important for the person who is ill, and accordingly lighting in hospitals is deserving of consideration, though as a matter of fact it is one that apparently receives little consideration in many hospitals. Altogether too often no attention is paid to the comfort or convenience of patients when it comes to the arrangement of the bed and the lighting fixtures of the hospital room. In many hospitals the chief source of light is high-powered electric bulbs fixed in the center of the ceiling, and no matter where the bed may be placed the patient is forced to face a strong light. Even while convalescing and trying to read the same condition prevails. If the patient complains, and asks that the bed be changed so that the light will not be faced, the attendants may comply with the request, but the next patient who goes into the room suffers from the same sort of idiotic stubbornness on the part of hospital attendants in avoiding the requirements that make for the comfort of the patient. What is needed is a definite and unvarying rule to the effect that no patient shall at any time be subjected to the direct rays of light, either natural or artificial, and that all light must come from behind or from the side. If this rule is followed there are many patients who will be made more comfortable and no doubt convalescence will be speedier. In reality, bad lighting conditions are making impaired eyesight in a majority of people through light that is inefficient and insufficiently controlled. That is bad enough when it applies to people who are guided by their own convictions but is

doubly worse when it occurs as the result of the carelessness and lack of interest displayed by hospital authorities upon whose shoulders falls the duty of placing sick people in the very best environment and under healthful conditions.

### SELF-PRESCRIBING

SELF-PRESCRIBING is a dangerous practice and it is employed by a large number of people. It has been brought about solely and alone through the blunder on the part of physicians in telling their patients what is being prescribed for them. The old saying, "A little knowledge is a dangerous thing," holds true when it comes to the prescribing of medicine, and lay persons are not capable of judging as to when and in what quantity any therapeutic agent shall be employed. Not only has self-prescribing become common through the assistance of physicians who have told their patients what to take, but the practice has aided proprietary medicine manufacturers, who, first catering to the wants of physicians, finally ignore the physicians and appeal directly to the public. Thus, aspirin, a much used and greatly abused proprietary preparation, owes its sale direct to the public to the fact that physicians once prescribed it and were foolish enough to tell their patients that they were prescribing it. Now the manufacturers of aspirin are advertising directly to the public, and in a way that makes the use of the preparation a dangerous practice that is not employed with any intelligence in a large percentage of the cases in which it is used. We are opposed to the practice of some prominent physicians of telling their patients exactly what is being prescribed and the dosage, and for the reason that such a practice is fraught with the gravest kind of danger, as evidenced by innumerable instances where serious results have occurred in consequence of self-prescribing.

### PERIODIC HEALTH EXAMINATIONS

IF we are mistaken we would like to be corrected, but we are of the opinion that the majority of the physicians of Indiana are, figuratively speaking, "asleep at the switch" on the subject of periodic medical examinations of apparently healthy persons. There is no reason why this should be so, for Indiana physicians are as progressive and up to date as the physicians of any other state, and yet we feel sure that a procedure that has met with very great favor in many other states, and particularly in many of the eastern states, has been sorely neglected in Indiana. The manual of the A. M. A. and the examination blank covering the subject of periodic health examinations were issued in 1925. These were supposed to be placed in the hands of every Indiana physician, not for the purpose of filling up a wastepaper basket, but for actual use. What has

been done with them, and how many physicians can say truthfully that they not only made use of the manual and blank but constantly have promoted the idea that periodic medical examinations of apparently healthy persons is a necessity in helping people to keep well? We hear of county medical societies in many states of the union taking the initiative in this matter by advertising to the public that health inventories are necessary if we are to know the actual condition of our physical well-being. How many county medical societies are there in Indiana that have been advertising this fact, or its members preaching the gospel of periodic health examination? As a matter of fact, for those sordid individuals who always look to the money side of every question, periodic examinations are an avenue of profit and puts the physician in touch with his patrons. However, the big thing is the work of spreading the gospel of health and how to keep it, and the medical profession should be interested in any enterprise that aids the good work.

### CREDITING PHYSICIANS FOR CHARITY WORK

IN a former issue of THE JOURNAL we commented on the enormous amount of relief work done in the flooded districts of the South and the part played by scientific medicine. One of our southern friends says that it might be well to call attention to the fact that out of all of the relief workers in the South during the devastating flood the majority of them, with the exception of members of the medical profession, were on salaries. Food, clothing and supplies of every kind were furnished by the Red Cross and various charitable organizations, but for the most part those who were engaged in handling these supplies and distributing them were paid workers. No one thought of paying or offering to pay the medical men for the wonderful work that they did. In reality the medical workers have not asked nor have they expected to be compensated for their services, but when it comes right down to brass tacks physicians ought to be given more credit for such self-sacrifice than they ordinarily receive. This reminds us that this fall there have been innumerable campaigns in every populous community to raise a community chest fund, and solicitors have had no hesitation in asking medical men to contribute money far in excess of real ability to sustain such a drain, and with no credit given for not only the immense amount of charity work done by physicians but for the actual money expended by them in connection with such work. Some of the solicitors for community chest funds think they are doing a wonderful thing if they give up a couple of hours each day for five days, and they use that as an argument for not contributing anything in real cash. That service doesn't amount to a hundredth part of the charity



service rendered by many fairly busy physicians in any community. A physician rarely is given credit for the time and skill devoted to the worthy poor or for the actual money overhead charge embraced in the expense of running an automobile, paying salaries of assistants and nurses, and perhaps furnishing gauze, ether, laboratory supplies, and medicine. It might be well for physicians to say to these solicitors for money donations that credit must be given for what is donated in the regular course of practice, and that such contributions must be placed alongside of any cash contributions that are given at the time the funds are raised.

### ADVERTISING THE STANDARDS OF THE PROFESSION.

The Iowa doctors are conducting an advertising campaign in an effort to acquaint the public with the fundamentals of health and the standards of the profession. The advertisements are appearing weekly in the lay press. The campaign was undertaken with a view to presenting to the public facts which will permit discrimination in the selection of a physician from among those using the title of "Dr.," many of whom have no education generally and are totally without medical training. At present many persons are confused when it comes to the selection of a medical attendant, as the culs have been advertising extensively and readers of their advertising are led astray. The advertising of the Iowa physicians points out that in the practice of medicine all of the sciences are included. Those who lack the basic medical education cannot be expected to diagnose and treat properly the problems that are essentially medical and surgical. The public is made to know what the medical profession stands for and what its education and training is before being licensed to practice. The advertisements that have been published do not exploit any individual physician, nor any school or method of treatment for any diseases, or any cure, and they do not include the names of any officers or the members of any committees of the profession. The point made in the advertising is that the requirements for the regular practice of medicine are more drastic than those imposed upon any other profession or school of therapeutics, and by so doing the state sets the medical profession apart and eloquently testifies to the priority of its position and the vital interest with which its relation to the public health is charged. Attention also is called to the fact that all of the doctors, good, bad and indifferent, are catalogued at the A. M. A. office in Chicago, and that any doctor, whether a real one or a make believe doctor or quack is catalogued with full particulars as to his qualifications, and thus the standing of any individual doctor may be obtained by any one interested.

### SUN-TREATMENT

#### With Comment on "Nature" Remedies

The regular medical profession has showed remarkable acumen in refusing to be dubbed as any sort of -path: it is regrettable that it has not shown the same intelligence as to the -therapies; that it has allowed itself to go off after hydro-therapy, drug-therapy, mechano-therapy, electro-therapy, physio-therapy, helio-therapy, *et al.* This is not to be taken to mean that there is not some good in each of these. What we are saying is that, just as we welcome all knowledge of disease processes which is attested by evidence worthy of the name, irrespective of its agreement or disagreement with any ironclad theory, so we joyfully accept all methods of treatment, which have *proved* to be beneficial.

Our objection is that the mind is much influenced by the impressive word, made up of "-therapy" and a high sounding prefix, and we are tempted to give a tryout to that exclusive form of treatment, when it may be fairly certain that our patient needs the application of all the knowledge we have of the whole art of medicine.

The various -therapies have led us into many pitfalls. They have worked many hardships on our trusting patients. We are led out of our course by our heart's desire to find, wrapped in one bundle, the truth which we are told is to be found "here a little and there a little."

Just now we read much of helio-therapy, a measure which, since it is advocated for the cure of so important a disease as tuberculosis, is well worthy of careful study and just appraisal. A thoughtful treatment of this subject<sup>1</sup> was presented before the American College of Physicians, last February.

The approach is such as to gain one's confidence. The opening sentence says that "the subject is complex and its problems are by no means completely solved." The author recognizes that the use of sunlight has increased so much that "it is not only the style, it is positively the rage." He is convinced of the value of sunlight as a therapeutic agent; and he is also convinced that in its use the greatest vigilance needs be exercised in order that more good than harm result.

"I know," he tells us, "that many sufferers from tuberculosis are being given sun treatment who ought never, under any circumstances, to receive it, and, on the other hand, that many who should receive it with benefit are being made worse by it." Again, "this agent is just as potent to do harm as it is to do good."

The warning is passed on for the very urgent reason that we are prone to regard so-called "natural" agencies as necessarily devoid of harm. Witness the elaborate arguments of the vendors

1. "Direct Sunlight in the Treatment of Tuberculosis; Conclusions from Twelve Years' Experience," S. H. Watson, Tucson, Ariz., *Annals of Clinical Medicine*, April, 1927.

of mineral waters stressing the fact that their product is "just as it comes from Nature's laboratory"; and the lines on *Wine of Cardui*, "Take and be healed; the Great Spirit planted it." It seems not to occur to those who are influenced by this kind of reasoning that the laboratory of Nature has provided millions of gallons of ordinary water for every one with any considerable content of mineral; and those who extol sunlight as a curative agent provided by Nature, appear to take no account of her provision of shade, and gumption enough to get to it, unless we are hindered by faddists.

Dr. Watson concludes his admirable article with; "Finally, in whatever type of tuberculosis helio-therapy is used, *it should always leave the patient feeling the same, or better, both during and after his sun-bath; if it does not do so something is vitally wrong, and the patient should beware.*"

Wholesome doctrine we say—as to sun treatment, or any other form of treatment. He arrogates to himself too much of knowledge, who assumes the contrary. The burden of proof lies on the man who says that anything disagreeable to an individual is good for him.—*Southern Medicine and Surgery*, September, 1927.

#### WHISKEY AS MEDICINE IN INDIANA

THE temperance fanatics are making a great hullabaloo about Attorney-General Gilliom's action in procuring whiskey for a sister who was desperately ill in a hospital at Decatur. The physician in charge stated that a crisis in the patient's condition was near and that he thought that whiskey would serve a more useful purpose in treatment than anything else, and accordingly the attorney-general supplied the necessary amount of the medicinal agent that had been recommended, which was administered, and whether it saved the life of the patient or not, at least the patient recovered. The episode, an infraction of our idiotic and inconsistent Wright bone-dry law, has been made the object of investigation by a grand jury. The physician who was responsible for prescribing the whiskey has testified that if it be a violation of the law to use whiskey, he expects to violate the law just as often as he would violate a speed ordinance to get to a dying patient. His action and his opinion in the matter is what could be expected of a very large percentage of the physicians of the state, many of whom no doubt already have broken the prohibition law all to pieces in procuring and using whiskey in connection with illness. Yet Reverend Shumaker says the physician should be prosecuted. We believe in reasonable prohibition, but we have no respect for any law that abridges the right of a physician to prescribe whatever he sees fit for the relief of serious illness and in such quantities as in his judgment seems indicated. It is true that there is a difference of opinion even among phy-

sicians, as to the value of whiskey as a medicinal agent, but that does not alter the basic principle involved. There's a difference of opinion as to the use of many other agents having similar action. Inasmuch as a large percentage of the physicians of the country are satisfied that alcohol has a definite place as a therapeutic agent in the treatment of illness, then no law should prevent them from utilizing such agents in the alleviation or cure of the sick. The trouble with this country is that we have too many laws that are not based on sense or reason, and the more of that kind of laws we pass the more will we find disrespect for all laws, even those that are meritorious, growing in the country. We need laws for the protection of people and property, but they should be such laws as are consistent, are favored by the public, and can be enforced. There is something radically wrong with a law that cannot be enforced and that breeds only disrespect on the part of a large percentage of the people.

#### EDITORIAL NOTES

##### DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

THIS is the month for paying medical society dues. PAY NOW.

THE JOURNAL extends to every one of its readers the Season's Compliments and best wishes for the New Year. We hope that your Christmas Savings check is large, and that Santa Claus will fill your stocking to overflowing.

MERCURCHROME is another drug that now is being advertised to the public after having received the endorsement of the medical profession. Self-prescribing is promoted in that way.

THE Chicago Medical Society has nearly 4200 members. It is the largest local medical society in the world. It must keep the secretary busy to collect the dues from that number of men.

Too much publicity cannot be given the fact that medical laws are for the protection of the people. It is unfortunate that in the past this argument has not been used with more telling force.



OUR Bureau of Publicity is gaining in popularity. It is surprising how many lay papers throughout the state are printing the bulletins regularly.

WE have sufficient confidence in human nature to think that there are a few grateful patients who will remember the doctor at Christmas time, at least by a partial payment of bills for services rendered.

THE rottenest kind of medical fakes are being exploited over the radio. Is there no way of stopping this kind of humbuggery? The government licenses the radio station. What is the government going to do concerning this rank deception of the people?

ASPIRIN is advertised in the lay press as a cure for pain, and the statement is made boldly that it does not affect the heart. The latter statement is an untruth and the public should know that fact. Aspirin is a heart depressant and the manufacturers know it.

OH, LORD! give us strength to continue to resist the temptation to feed arsenic in a lethal dose to the patient who says, "Doctor, I am taking chiropractic treatments but I thought perhaps a little assistance from you would help the chiropractor to secure a better result!"

How many Indiana communities are vaccinating their children against diphtheria? Three treatments with toxin antitoxin creates an immunity and protects against diphtheria. Are physicians recommending this protective treatment? If not why not?

MUSSOLINI is a dictator but he is doing a lot of good work for Italy. Recently he has announced that adenoid tissue must be removed from children and young adults in Italy. Mussolini says that adenoid tissue not only helps to produce stupidity but that it predisposes to disease.

WELL, you don't have to hunt for a physician on the golf links during this kind of weather. He may be swinging his club indoors, but he isn't very fond of chasing a little red ball on the snow. Concerning the latter one physician has said, "I may be a damn fool about golf but I'm not that big a fool."

THE Indiana State Medical Association will furnish speakers in any part of the state to any lay group which so requests. We suggest that physicians urge lay organizations to make use of this offer on the part of our Association to supply speakers that will measure up to professional requirements.

THIS is the month for paying medical society dues. Why not get the matter off your hands right now by sending your check to the county medical society secretary. Procrastination only makes the matter worse, and the delinquents not only put many persons to much trouble but actual money expense as well.

BEGINNING with the January number of THE JOURNAL we are going to have a department devoted to correspondence which we shall consider an open forum where physicians may discuss their problems and express opinions on any subject that they think will be of interest to the readers. Let us have your communications.

It is reported that hypnotism has been used successfully in one of the Chicago hospitals, and under its influence a major operation was performed without the knowledge of the patient and without discomfort. In all probability hypnotism will not gain in favor for its use is attended with a little danger from unscrupulous operators.

DR. ARTHUR J. CRAMP, director of the Bureau of Investigation of the American Medical Association, in an address delivered before the Cincinnati Medical Society, said, "The best that the medical profession can do in protecting the public is to turn the light on the methods of the fad-dict and the quack so that the fad or the fraud becomes apparent."

WELL, it has been a long time since Reverend Shumaker, the head of the Indiana Anti-Saloon League, was found guilty of contempt of the Indiana Supreme Court, and yet so far as we know no punishment has been inflicted. Can it be true that some partiality is to be shown because of the prominence of the convicted one and the influence exerted by his friends?

If you do not pay your taxes on time you pay a penalty. Why shouldn't physicians pay a penalty, for failure to pay their medical society dues on time? As a suggestion we recommend that every county medical society establish a rule to the effect that delinquents shall pay a penalty of ten per cent per month upon delinquent dues and that no delinquent dues be accepted without the payment of the penalty.

IN answer to the query from the advertising representatives of a well-advertised cigarette: "Yes, we have been smoking cigarettes of your manufacture for over a year and we do not think that they cause any less irritation to the throat than any other cigarettes. You have a good cigarette, but when you say that it is less irritating to the throat than other cigarettes you are passing on a lot of apple-sauce."

ISN'T it disgusting to think that the lowest form of politics is employed by some men in securing public office? We have learned that such tactics are employed in securing some offices occupied by medical men, and it makes us blush for shame to think that capability, efficiency, and integrity cannot be considered in the selection of medical men who have anything to do with medical or public health matters.

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ALREADY the railroad companies are preparing for heavy travel to the Minneapolis session of the American Medical Association. It has been proposed that the Indiana doctors go in a bunch, either by special train or in special cars which can leave from some central point like Indianapolis. The trip requires but one night from Chicago, and the railroad service by three competing lines is of superior excellence.

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REMEMBER that when you pay your medical societies dues to the county medical society secretary the payment includes *only* the dues to the county medical society and the Indiana State Medical Association. It includes *no* payment to the American Medical Association. Dues to the American Medical Association are payable at the association office in Chicago and include a subscription to the *Journal of the A. M. A.*

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ATTORNEY GENERAL GILLIOM has found another champion in Judge Lindsey, of Denver, who in sanctioning the use of alcoholic beverages in sickness quotes the Bible, (Proverbs, Chapter 31, verses 6 and 7) in which will be found the following: "Give strong drink unto him that is ready to perish and wine unto those that be of heavy hearts. Let him drink and forget his poverty and remember his misery no more."

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A FRIEND puts the query, "How does it happen that the Christian Scientists have not taken advantage of the radio in spreading their propaganda?" Perhaps it is because propaganda over the radio costs money, and the Christian Scientists are not very strong on the question of spending money for propaganda and especially when they have so beautifully roped in the lay press for free advertising, lo, these many years!

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SOME of the public schools in England have had the window panes replaced with glass constructed to permit the passage of the ultraviolet rays of sunlight. This is an up-to-date way of promoting health, and if the sunlight from which the ultraviolet rays have not been reduced or destroyed is coupled with proper ventilation, there are apt to be some results secured in furthering the general health of the English school child.

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ASIDE from a serum for the treatment of infantile paralysis, made by several manufacturers

and for which splendid beneficial results are reported, there is a new treatment which consists in injecting the serum of the blood from a convalescing case of infantile paralysis into a patient who is suffering from the disease in its early stages. It looks as though the time is not far distant when infantile paralysis not only will be prevented but cured.

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Now that the lay press is publishing so much information concerning liver as an exceptionally nourishing diet for anemic patients we shall be surprised if the meat packers do not put up the price of liver, and perhaps put that humble meat ahead of porterhouse steak. Well, if they desire to popularize liver consumption all that will be necessary is to put up the price and everyone will want liver because he thinks it is the best food or perhaps a delicacy.

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THERE is absolutely no excuse for the diphtheria mortality that is reported for Indiana. The early diagnosis and the immediate administration of diphtheria antitoxin in large doses will reduce the mortality very materially. Diphtheria prophylaxis and treatment is a subject with which every practicing physician should be thoroughly familiar. Diphtheria can be wiped out of Indiana entirely if all of the physicians, aided by the health boards, will give this matter appropriate attention.

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THE medical profession is in a large part responsible for the growth of quackery and of the entire list of pseudo-medical cults. The public wants protection against quackery and medical frauds, but does not know where to seek that protection, and does not get it from the medical profession. It is time to throw off this spineless attitude and tell the people the truth. This means no compromise with chiropractors, Christian Scientists, or any other class of people who are deluding the sick.

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AN Indiana physician, Dr. Homer J. Hall, of Franklin, is one of the vice-presidents of the No-Tobacco League. We hope that Dr. Hall will not advocate shooting us at sunrise because we find solace in our old friend, the pipe. This effort on the part of a lot of well-meaning people to regulate the private lives of every one is getting on our nerves. In fact we in America seem to be cultivating a very fine quality of intolerance, and we believe that some day we are going to pay the penalty for too much meddling.

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As an evidence that we had a few dumb-bell medical examiners during the last war it now is reported that one young man was exempted from military service because of deafness and since then it has been discovered that both of his external auditory canals were well-plugged with



beans, surrounded by a fine cushion of wax, the removal of which restored useful hearing. Fortunately such examples of ignorance and inefficiency on the part of medical examiners during the late war were few and far between.

THE State traffic police are pinching the fellows who fail to observe traffic laws. They are not so interested in catching the speeder, who may be a safe driver, as they are in rounding up the fools who never dim their lights, fail to have proper tail lights, and who do not observe signals concerning the right of the road. It isn't the fast driver who causes accidents, unless he is full of booze, but the comparatively slow driver who hogs the road, drives without a tail light, turns without giving proper warning to those who may be following.

THE MEDICAL SOCIETY of the County of Kings, New York, several years ago adopted a program of graduate medical education that has been carried out with great success and is worthy of adoption by any medical society in populous centers where well-equipped hospitals are in evidence. However, the courses may be modified to meet conditions in less populous districts than Brooklyn, and graduate instruction could be given in any one of a half dozen cities in Indiana. Will some county medical society in the State take the initiative?

A periodic conference among some of the officers of eastern medical associations has met with such brilliant results through the interchange of ideas and the discussion of mutual problems that we suggest that such conferences be adopted in the west and middle west. Why couldn't Wisconsin, Michigan, Illinois and Indiana join in a conference to be held in Chicago, or Indiana join with Ohio and Kentucky in a conference to be held in Cincinnati or Louisville? It seems to us that this is a practical suggestion that is worth serious consideration.

EVERY physician in Indiana should know, and impress the fact upon members of the Indiana Legislature, that the State Board of Medical Registration and Examination is *not* supported by taxation but by fees from candidates for licensure. However, some of these fees are diverted wrongfully to the general fund, which act is a great injustice as it does not provide the Board with funds to enforce the medical practice act as intended by law. The Board is entitled to and should have the money that it collects as fees from candidates for licensure.

A READER of THE JOURNAL says that he agrees with us that the physician who is called upon to treat girls and young women for nervous affections should make a careful inquiry as to cigar-

ette smoking, and he says that much to his surprise he has listened to the confessions of many young women concerning excessive cigarette smoking when such a habit was least suspected. That tobacco is injurious to many persons is unquestioned, and this is true especially in the female sex where we find a more sensitive and impressionable nervous system.

IN this number of THE JOURNAL we print the index for the year, which will be found useful to those members of the Association who bind their journals. We suggest that this binding be done at once, for we have learned by experience that there are many men who postpone binding the journals until a later date, and in the meantime lose some of the numbers and apply to us to supply the deficiency when perhaps all editions have been exhausted. Right now we can supply a few back numbers, but later we may not be able to fill orders of that kind.

HERE is hope for the bald-head. An enterprising cosmetic surgeon, of New York City, claims to have transplanted sections of hairy scalp to another, and in that manner corrected baldness. He says that while he can find enough rich men who are sensitive about their bald heads and willing to pay the price for a head of hair furnished by the transplantation method, it is difficult to find suitable subjects from whom to take the transplant. Who knows but that the toupe business will go into the discard in view of the claimed results for this new surgical feat.

BERNARR MACFADDEN has been wine and dined in London, and while there he took occasion to tell the English people who were waiting for his words of wisdom that they ought to have a Minister of Recreation in their government, whose business it would be to look out for the physical training of the people! No doubt England will adopt the suggestion immediately after having received it from such an eminent source. Perhaps the subscription list to *Physical Culture* will be doubled in the British Isles following Macfadden's visit to dear old England.

As boys we used to smoke corn silk, dried mullein leaves and other vegetable mixtures having either a rotten taste or no taste at all, and we have been wondering if denicotinized tobacco, sold at a fancy price, may not have been put on the market to make smokers think of their boyhood days. Anyway, we think it would be well for the public to avoid being fooled by denicotinized tobacco. Furthermore, it should be remembered that nicotine is perhaps one of the least harmful of the many ingredients contained in tobacco and perhaps absorbed during the process of smoking.

SOME of the physicians of the country are being exploited in connection with the advertising of a well-known cigarette. We hope that the enterprise will act as a boomerang and that the manufacturers, led on by advertising agents, will pay the penalty for such injudicious and unfair methods in attempting to boost sales. When you come right down to facts the great majority of intelligent physicians of this country believe and know that it is all bunk trying to prove to the public that a certain cigarette is less injurious to the throat than any other. That may be good selling talk but it is not the truth.

THE Ohio State Board of Health issues a warning concerning the dangers of permitting chiropractors and other cults to manipulate patients convalescing from infantile paralysis. Rough handling of the spine will render impossible the recovery of some affected tissues which would otherwise take place. Not only are the patients injured by the manipulations of chiropractors and other cults, but those things which may be expected to prevent the occurrence of deformity are omitted. Our own Indiana State Board of Health could with profit follow the lead of the Ohio State Board of Health in issuing similar precautions.

WE are informed through what we think to be a trustworthy source that whereas the chiropractic school at Davenport, Iowa, had nearly five thousand students three years ago, the number has dwindled steadily until today it is less than four hundred. The Ross Chiropractic School of Fort Wayne which turned out hundreds of graduates (?) after a few weeks of attendance, also has "gone to the wall." To our notion this does not indicate that chiropractic graduates are having difficulty in practicing, but rather that the public has discovered that chiropractic is worthless and in consequence the pecuniary gain is not so tempting.

THE Macfadden publications are havens of refuge for some of the medical fakes that desire to secure advertising space. Among the latter is the Professor Sholder Institute for the cure of baldness and scalp diseases. In the October number of *Hygeia*, Dr. Arthur J. Cramp, of the Bureau of Investigation of the A. M. A., fully exposes the crookedness of the Sholder Institute scheme. It proves interesting reading. However, the Macfadden publications and some other lay publications having elastic consciences or no conscience at all when it comes to getting money, will continue to take the Sholder Institute advertising.

A LONDON doctor complains about not being paid when called in emergency to render services in case of accident. When the bill is presented to the person who has received the services sometimes the reply comes back, "Get your fee from

the police who called you." That is a fine example of gratitude, and yet what occurs in London occurs in every city and town in the United States. Somehow or other people haven't gotten it through their heads that doctors get their bread and butter from services rendered and pay received therefor, and that they are just as much entitled to compensation as one rendering services in any other vocation.

WE have been rather amused to have a physician suggest to us that we ought to "soft pedal" a little upon our attacks on chiropractors, christian scientists, and other of the pseudo-medical cults, for the reason that criticism incurs the enmity of those organizations and they are very apt to be more antagonistic to regular medicine in consequence. That is the trouble with the medical profession—we have "soft-pedaled" too much. Had we spoken our minds a little more freely a few years ago, not only would we but the public be in a safer condition today. There are altogether too many people quite willing to compromise with evil-doers.

IN spite of all that we have had to say in THE JOURNAL concerning crooked and untrustworthy collection agencies, we learn that very recently a number of physicians in Indiana have given their patronage to a collection agency we know to be tricky. Certainly physicians have earned the reputation of being the biggest suckers that travel on two legs. There really is no excuse for being ignorant concerning the commonest accepted business methods, and while a mistake through ignorance perhaps could be pardoned, a mistake made with full knowledge of the conditions and subsequent results stamps the one making the mistake as just a plain "dumb-bell."

WOULDN'T it make a horse laugh to hear some of the Indiana officials pleading for loyalty to Indiana and its institutions following upon the heels of exposure of some of the worst rottenness in public life that ever has been heard of in any state? The citizens of Indiana owe loyalty to no party and no individuals that betray a trust. The truth of the matter is that Indiana has been the victim of rotten politics, and many of its policies have been dictated in a large measure by a few fanatics. The one way to put Indiana on the map again with a reputation for decency is to have a house-cleaning and get rid of all of those who have been responsible for our ills.

YE GODS! An Indiana chiropractor in an address on the subject, "The Cause and Treatment of Infantile Paralysis," printed in the lay press, proved himself both a knave and an ignoramus when he stated that "infantile paralysis is one of the most positive signs of nerve pressure in the spinal column, and the only known scientific



treatment for it, either during the acute symptoms or for the relief of the sequellae, is chiropractic adjustment." If that sort of criminal fakery is not enough to make the average well-trained physician go out and commit murder among chiropractors in order to save the public we misjudge the attitude of red-blooded physicians who detest deception.

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WELL, well! Now the women's magazines are teaching the gospel of plumpness in order to make women attractive. They say no woman is beautiful who is skinny or angular, and the advice is thrown out that if young women wish to make themselves attractive they must change their ugly hollows for lovely curves. We thought the pendulum would swing in that direction, and it is a good thing, for there are altogether too many young women who are becoming invalids by injudicious dieting in order to make themselves thin and willowy to meet fashion's decree. Let us thank the dressmakers, the stage, or anyone else responsible for plumpness as a fashionable condition for our young women.

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"DRINK no longer water but use a little wine for thy stomach's sake and thine often infirmities."—(Tim. I, Chap. v. verse 23). Such is the biblical injunction, and it is the excuse given by one of the prominent workers in the Anti-Saloon League for procuring alcoholic beverages in case of sickness in his family. When we live in glass houses it is not a good idea to throw stones. From a physician's standpoint the biblical injunction is not without merit, but Reverend Shumaker and a lot of his followers have announced that sickness and infirmities shall be no excuse for prescribing alcoholic beverages, though it seems rather clearly established that some of these fanatics are guilty of the very practice which they so loudly condemn.

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THE Mormons are spreading their propaganda in Indiana at the present time through pamphlets and circulars distributed by house to house canvass. We note that they have a bureau of information and a committee on publication. We wonder if they have not taken their cue from the Christian Scientists. As yet the Mormons haven't succeeded in securing as much free newspaper publicity as the Christian Scientists get, but perhaps in due course of time they will have as effective an organization for spreading their propaganda as that of the Christian Scientists. Well, the constant dripping of water on stone will wear the stone away, so if the Mormons and Christian Scientists keep at it long enough they probably will have something to show for their work.

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THE latest thing is a liver cocktail for pernicious anemia. According to the *Journal of the A. M. A.*, of Sept. 19, 1927, Dr. W. T. Wilkins,

Jr., gives a liver cocktail recipe which is as follows: After having scraped the liver it is run through a meat grinder twice, the finest cutter being used, and placed on ice immediately. One half pound of liver makes four tablespoonfuls of crushed product. Prepare a sauce as follows: Tomato catsup (Heinz),  $\frac{1}{2}$  cup; lemon juice,  $\frac{1}{4}$  cup; Worcestershire sauce, 2 teaspoonfuls; chives (finely chopped)  $\frac{1}{2}$  teaspoonful, and salt and pepper, to taste. Mix the liver and sauce in the proportion of one part crushed liver to two and a half parts of sauce. Chill thoroughly and serve in a cocktail glass with salt crackers or wafers.

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IT is surprising to note the number of physicians who think that albuminuria is indicative of renal change and who seem satisfied with the chemical examination of the urine in making a decision as to whether or not the patient has some form of nephritis. Some of those physicians do not seem to remember that the microscope is a necessary equipment in a general physician's office and that its use will throw light on many an obscure case. It might be well for some of the dumb-bells in the practice of medicine to refresh the memory concerning the fact that in chronic Bright's disease it is possible to obtain a sample of urine containing little or no albumen but in which a microscope will show granular and other casts. It also should be known by them that blood chemistry throws much light on the subject of kidney function.

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WE understand that the representative of a collection agency is going over Indiana telling physicians that the editor of *THE JOURNAL* is very enthusiastic concerning his service. That is a deliberately told falsehood. We recommend no collection agency, and in an endeavor to protect the physicians of Indiana we have refused a good many hundred dollars worth of advertising offered without solicitation, from various agencies desiring to get business from doctors. We have said and still say that there isn't one collection agency out of ten that is trustworthy, and at the present time we know of no agency that we feel is sufficiently trustworthy to merit our unqualified recommendation. We are referring to collection agencies and not the collection departments of banks and trust companies, or commercial agencies like Dunn or Bradstreet.

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As we recall it, Irvin Cobb wrote an article for the lay press on the subject of operations, and it proved to be quite a humorous description of what he went through in having his appendix out. However, Cobb has been left "tied to the post" in the race for honors covering a humorous write-up of surgical operations, for now comes Will Rogers, in the *Saturday Evening Post*, with a very funny description of his preparations for

and actual experiences in connection with the removal of gallstones. It isn't everyone who can pay his surgeon by writing a description of his feelings and experiences in connection with an operation, but we will bet a dollar to a punched nickel that Will Rogers got ten times more from the *Saturday Evening Post* than he actually paid his surgeon for the major operation which afforded the subject of the article.

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THE opinion is growing over the United States that medical men should point out to the public the inconsistency and falsity of many of the claims put forth by some of the pseudo-medical cults. We cannot be excused for failure in the performance of duty when we are silent in the face of what we know to be positively harmful treatment administered by the pseudo-medical cults in the management of many of the communicable diseases as well as in those diseases and abnormalities known to be curable by scientific methods. We also are derelict in duty when we fail to advise the public concerning the dangers of permitting serious affections, and especially the communicable diseases, to receive no further attention than that given by some Christian Science healer. The public deserves to have the truth and without any camouflage.

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THE Adams County farmer who paid \$278 for a pair of glasses that were supposed to cure an imaginary eye trouble certainly was of the "sucker" brand. We would like to bet that no Adams County physician of reputable standing has been able to collect a tenth part of that sum from the aforesaid farmer for real honest-to-goodness medical service. High pressure salesmanship will sell most anything, but when you sell a fake it is necessary to "get in and get out" as quickly as possible or otherwise the seller is apt to get into trouble. The average reputable physician does not engage in high pressure salesmanship, but he has something that is dependable and as he lives in the immediate neighborhood of his patrons he cannot afford to be anything but honorable in his dealings. It is a little discouraging, though, to see neighbors and friends turn to quackery and pay extortionately for it.

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AT the secretaries and editors conference in Chicago in November the attorney for the A. M. A. read a statement, said to have come from Palmer, head of the Palmer School of Chiropractic in Iowa, which is very flattering to Indiana inasmuch as it said that this year's legislation passed in Indiana closes the state to chiropractors. We have a bunch of chiropractors who will be licensed according to the provisions of the new law, but it is understood that no more can get in, so perhaps we should be thankful for that. However, we predict that license or no license the chiropractor is doomed, for

the public is not going to stand for such buncombe very long, but when the chiropractor leaves the scene of action, like many other pseudo-medical cults, there will spring up something else to fool the public, and it will be just as inconsistent, illogical and fantastic as the chiropractic teaching and practice.

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HERE'S a good one! A Christian Science healer died in Boston. Some of the Christian Scientists slipped a cog and failed to secure a death certificate that would be accepted by the health authorities. In consequence a postmortem was insisted upon and held. The result showed that the patient died from the effects of strangulated hernia, a condition curable by operative means. Thus, a needless and inexcusable death due to adherence to a faith and practice which may be good for imaginary ills but is of no earthly account in a real pathologic condition requiring the services of a skilled surgeon. The patient was of age and, of course, if such a person elected to shuffle off by the Christian Science route and without making any effort to overcome the cause of death, then we suppose that nothing should be said. However, publication of the facts, and they should be published, ought to open the eyes of a few dupes who may have a leaning toward Christian Science as a cure for all ills to which flesh is heir.

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IT started with a chiropractic broadcasting station, but now it has spread until the patent medicine manufacturers and the quack doctors are making themselves heard over the radio. The latest thing is to sponsor the medical fake with a band, and usually a good one. How long will it be before we hear the Aspirin Blues, the Mercurochrome Toddle, the Whirling Spray Waltz and the Birth Control Revue? In fact, there isn't any reason why you shouldn't hear most anything over the radio, whether it is for the good of the public or not. We realize that the maintenance of a broadcasting station is an expensive proposition, and no one is going to foot the bills without getting some kind of a return, usually in the shape of money. Therefore, we can well understand why some broadcasting stations are maintained purely to advertise radios, and can be rented out for some kinds of merchandising, but all forms of questionable medical advertising by radio should be prohibited and for the reason that it is detrimental to the best interests of the people.

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AT a recent meeting of physical therapists, a surgeon connected with the Committee on Physical Therapy of the American Medical Association said that the preservation of joint function following injury is one of the most difficult problems in surgery, and that he gets the best results in these cases by turning them over to physical



therapists. As an illustration he mentions dislocation of the shoulder, and says that a medical physical therapist will step in and secure results days and weeks earlier than the surgeon working alone can secure it. In commenting upon this matter another surgeon said that he had seen polo players who had been thrown from their ponies and came in with absolutely helpless shoulders. These cases were cured with from two to four static treatments of the arm and shoulder. He said that if the cases of dislocated shoulder received the same treatment after reduction they would be well in a few days. If such results are secured from physical therapy it is time to "sell" this new form of therapeutics to physicians generally, and surgeons in particular.

THE CENTRAL INDIANA LEADER contains an announcement from one "H. P. Klein, M.D.," (not found registered in our A. M. A. directory as an M.D.) who says he has opened an office for the practice of medicine and physiotherapy. The advertiser goes on to enumerate the various equipment which he has installed in his office for use in the treatment of many diseases that he names. This is on a par with other newspaper announcements in various parts of the state by men who advertise "permanent health" through the service rendered by "prepared" chiropractors. Well, you know the old saying "it pays to advertise," so these chaps who are paying for printer's ink probably will find plenty of patrons. Probably these physiotherapists, chiropractors, and others of their stripe believe in another old saying, "Toot your own horn, no one will toot it for you." When you come down to analysis it is a little surprising to note that there are many supposedly intelligent and rational minded people, sometimes belonging to our best families, who, figuratively speaking, buy a gold brick when they buy medical and surgical service, and "fall" for the advertising stuff. Eventually they are sadder but wiser, but that doesn't eliminate the original cost.

At the present time several men are going over the country delivering addresses before dinner clubs and other organizations in an endeavor, as they say, to "sell America to Americans." We believe in this idea, for it is high time that something should be done to offset the work of the parlor socialist who is preying upon the minds of gullible school teachers and women in general, to say nothing of the effect upon certain men who are susceptible to sugar-coated socialism or communism. To our notion the best way to improve America for Americans is to pay more attention to the ballot, and, if possible, prevent the election of a lot of rabid fanatics to public offices. Right now we have a few physicians in Indiana who if they are not radical socialists in belief come close to being of that stripe, and as near as we can find out, their grievances are due to

the fact that they have not been able to get along very well in the world, due of course to lack of initiative and necessary qualifications for success. It is the type of individual who "falls" for all of this socialistic and communist teaching. There are many inconsistencies and imperfections in our system of government, but they are not to be corrected by socialism, communism, bolshevism or any other ism advocated by discontented men and women.

WELL, Tom and ye editor attended the editors and secretaries conference in Chicago. At the conference were secretaries and editors of a large number of the state medical associations of the United States, together with the officers and the trustees of the American Medical Association. Many very interesting subjects were discussed and the interchange of ideas cannot but be helpful to those who in a large measure have to do with the destinies of the state medical associations. The thing that pleased Tom and ye editor more than anything else was to hear on every side that Indiana was considered one of the states where the State Medical Association is *doing things*, and has inaugurated many progressive features that are being slowly adopted in other states. To mention the medical defense feature and our bureau of publication is to mention only two of several things that came in for praise. What was particularly pleasing to the Indiana representatives was the general surprise that existed among so many of those from other states to find out that we are accomplishing so much upon such a small expenditure of money. Many of the state medical associations are spending four times the money that is spent by the Indiana Association and they are accomplishing very little. In short, if we may be pardoned for throwing bouquets at ourselves, we feel that the Indiana State Medical Association is exceedingly well managed, and it is on a business basis that does credit to the Association.

WE have received a descriptive circular concerning "Plastic and Esthetic Surgery," a journal edited by Charles Conrad Miller, 32 North State Street, Chicago, which smacks of personal advertising of the editor. We have no desire to kick a man who is down if he makes an honest effort to reform, but we do think that a word concerning the editor of the journal mentioned is not out of place and will enable our readers to judge correctly the probable scientific standing of the journal. As a matter of fact one Dr. C. C. Miller, having the same address as that given by the editor in question, is written up in "Nostrums and Quackery" Volume II, page 446. According to the *Chicago Tribune*, Miller once belonged to a quack syndicate, and a reporter told Miller at that time that he was the head of the biggest gang of robbers

unhung. In the propaganda files of the A. M. A. is a little booklet entitled "Medicine and Health," put out in 1915 by Charles C. Miller, of 32 North State St., Chicago. It obviously was an advertising pamphlet and was intended for the same purpose as that of the journal now being advertised. The thing that we cannot understand is why such a reputable and responsible publishing firm as F. A. Davis and Company of Philadelphia will consent to print and exploit books by an author of such questionable reputation as that of Charles C. Miller of Chicago, who so far as we can learn has no professional standing.

At the present time it is quite the thing for propagandists and those who are in the exploiting game for profit to talk before civic clubs and women's organizations. Medical fakers of many kinds find this a fertile field for operation. We have had occasion to condemn the practice of permitting Paul O. Sampson, advertising himself as a food expert, to get in the limelight through speaking engagements before various clubs, but it would seem that if there are any physicians in some of the civic clubs they have not made their influence felt by preventing fakers of the Sampson type from exploiting the clubs before which they speak. Usually we are inclined to think that women's organizations are most easily duped, but as a matter of fact, such men's clubs as Rotary, Optimists, Kiwanis, Lions, and even Chambers of Commerce, have "fallen" for a lot of quack speakers of the Sampson variety. We would like to admonish the regular doctors who are members of these various clubs that they owe a duty to themselves as well as to the members of their clubs to offer vigorous objection to the exploiting of the clubs by medical fakers. We also would like to suggest that the general rule be followed to investigate the qualifications of any speaker, and in this connection a prominent newspaper's comment on the subject is as follows: "A man whose business is speaking to civic clubs ought not object to carrying and exhibiting impeccable credentials. Every club should value its reputation sufficiently to investigate the qualifications of any stranger who seeks recognition."

Not so long ago we were in Palestine, and like all tourists we visited Nazareth, Bethlehem, Jerusalem, and many other places famed in Biblical history. We do not care to go back. There is much there that is legendary and traditional. Very patently an effort has been made to attract the tourists, and we are inclined to believe that some of the so-called historical places have been created or altered to attract the tourists. Aside from all this, when we were there, Jerusalem, Bethlehem, and many other places were not pleasing to visit. Perhaps it was the time of the year, or because the weather was a factor, but the muddy streets, the squalor and filth everywhere, and the almost

universal tendency on the part of the natives to take advantage of all tourists is enough to discourage all but those who are deeply interested in Biblical history and are willing to give credulity to all of the traditions and legends that may be interesting but failed to register with us. We are glad that we went to Palestine, and it was worth the time, effort and money expended to visit the ground that supposedly was trod by the Saviour and His disciples, to say nothing of the historical figures of ancient times, but we now can sympathize with a darkey who was sent to Palestine during the war, and wrote back to his mother as follows: "Dear Ma: I am located in Palestine where Christ was born, but I wish to Christ I was back home where I was born." Evidently the darkey was impressed as we were with the utter hopelessness of Palestine as an abiding place for any one who appreciates progressiveness, cleanliness, and fair dealing among the inhabitants.

CALIFORNIA is a dumping ground for quacks. The State has five distinct and separate boards for licensing those who want to treat the sick and suffering, and of course, all of the drugless cults are recognized. The daily papers of California carry pages of advertising by members of the various drugless cults, and some of the daily papers, notably the *Los Angeles Times*, run health columns that are in charge of the drugless cults and in particular naturopathy. The public is asked to send in questions concerning health and have them answered by a naturopathy health department, and the ignorance, absurdity, and ludicrousness of some of the answers show to what extent the lay press can be prostituted to commercialism. There was a time when California safeguarded the health of the people by stringent and rational laws concerning fitness for the practice of medicine and surgery. For some reason or other, and we are inclined to believe that it was laxness on the part of the medical profession, the public was beguiled into thinking that all of the training and education required of a regular physician is all buncombe as a necessity for success in caring for the ills of humanity, and in consequence the bars were let down and five separate and independent boards of registration legally established to license practically any and all who ask for the privilege of treating the sick. We do not like to be pessimistic, but we are inclined to believe that what has happened in California is going to happen everywhere else unless medical men begin pointing out the dangers of licensing uneducated and illy trained men and women to practice medicine.

SOME Indiana broadcasting stations are permitting I-on-a-co (the Magic Horse Collar) to be exploited to the public over the radio. The most astounding claims are made for this fake, as it is



recommended as a cure for many chronic and incurable diseases, not omitting cancer. In the March, 1927, number of *THE JOURNAL* we published the following concerning I-on-a-co:

I-on-a-co—The Magic Horse Collar.—California was not satisfied when it gave us the greatest piece of quackery, the electronic reactions of Abrams. Now we are treated to another piece of electrical hocus-pocus which comes from California: I-on-a-co, alleged to have been invented by one Gaylor Wilshire, and exploited by the I-on-a Company of Los Angeles. The device, one gathers from the advertising, will cure cancer, Bright's disease and paralysis, change gray hair back to black and give girls who use it a "permanent wave." A committee which investigated the device reported that I-on-a-co is simply a coil of insulated wire about 18 inches in diameter with a plug that permits the coil to be attached to an electric light socket. There is also a smaller coil that plays no part in the alleged curative use of the I-on-a-co, but plays an all important part in the magical features of the scheme. This coil has its two ends attached to a miniature light socket containing a small flashlight globe. When the larger coil is plugged into an alternating current electric light socket there is, of course, generated within the large coil a weak fluctuating magnetic field. This will cause the globe in the small coil to light up when it is brought in close proximity to the large coil. This phenomenon, while elementary to a degree, furnishes for the uninitiated that element of mystery which is so necessary to the successful exploitation of any alleged cure for human ailments. The I-on-a-co is used by placing this magnetic horse collar over the neck, around the waist or around the legs of the person who thinks he is going to be helped by a piece of buncombe of this sort.

WHEN Wall Street learned that Henry Ford had taken a cash loss of two hundred fifty million dollars in changing to a new model of flivver which has just been put on the market, and that despite this loss he still has a cash reserve of over three hundred million dollars, there was speculation as to what might occur if Mr. Ford found occasion to enter into unfair competition, and as a reaction the stock of the General Motors Corporation dropped from 141 to 125 on the market. The world never has seen such potential possibilities for harm from capital, and more particularly capital controlled by one family. It is fairly staggering to think that one man can stand a loss of a quarter of a *billion* dollars in a few months time and still have left over three hundred million dollars as a cash reserve. Think what it would mean to the business world if Ford elected to sell his new car at less than cost, which he could well afford if he desired to stifle the automobile industry. Think of the financial wrecks among moneyed

men, and the desolation and poverty that would come to millions of laboring men dependent directly or indirectly upon the automobile industry if Ford decided to use his power to control the automobile trade. As we have remarked before, isn't there something wrong with our industrial system when one man during the short space of thirty-five or forty years can rise from a position of comparative poverty to one in which he actually owns more than one billion dollars and probably absolutely controls the operations of several billions more. In this connection we are "cogitating," as the old negro says, on what would happen if Ford elected to broaden the sphere of activity of his hospital so that it embraced not only Detroit but many other communities through branch hospitals, and an endeavor should be made to standardize hospitals as the flivver has been standardized? Well, again as the old darkey says, "Let's not talk about that, for it's befuddling."

THE INDIANA STATE MEDICAL ASSOCIATION is taking a flyer in the shape of a donation to the Indianapolis Better Business Bureau on the theory that perhaps it will do some good in stamping out medical quackery. In reality we haven't a particle of faith in the enterprise, although we shall await results with considerable interest. Our experience with better business bureaus has not been a very happy one, and for the reason that we have not been able to interest a single better business bureau in Indiana in suppressing what are patently medical frauds used to swindle the ignorant and the poor. The trouble with the better business bureaus is that they are afraid of the newspapers, and the newspapers, being run for profit, are not going to turn down the juicy compensation that comes from a lot of medical frauds that pay the lay press handsomely for the privilege of getting their announcements before the people. If an interloper is stepping upon the toes of a merchant through unfair competition and the matter is reported to the better business bureau, some action is taken, and the newspapers, sensing the possibility of reduced patronage from local advertisers, are quite willing to listen to reason and in consequence something is accomplished by way of stopping the fraud. It isn't what is a matter of right, but a matter of dollars and cents, and inasmuch as quack medical advertising brings a handsome return to the coffers of the lay press, and there is little or no chance of loss through pressure from advertisers who might refuse to give their patronage to lay periodicals that are aiding a fraud, the quack medical advertising continues. Quackery would die except for advertising, consequently quackery is willing to pay handsomely for the publicity. With the exception of the *Indianapolis News* (which at the present writing isn't as clean as it used to be) there isn't a newspaper in Indiana that isn't guilty of

carrying the advertising of some of the worst medical frauds that ever were imposed upon a long suffering people, and the newspapers know that the advertising is fraudulent when they take it. One of the reasons it is not suppressed is because there is not enough influence brought to bear to make the newspaper editors and owners feel that public sentiment is against them. It takes a lot of moral courage to turn down a profitable advertising contract coming from medical imposters and worthless proprietary medicine manufacturers, and almost any newspaper editor can ease his conscience when it comes to putting figures on the right side of the ledger.

### DEATHS

O. M. JOHNSON, M.D., of Kokomo, died November 13th, aged 49 years. Dr. Johnson graduated from the Bennett Medical College, Chicago, in 1907.

CHARLES WILSON FRY, M.D., of Huntington, died October 18th, aged seventy-four years. Dr. Fry graduated from the Cincinnati College of Medicine and Surgery in 1886. He was a member of the Huntington County Medical Society, the Indiana State Medical Association and the American Medical Association.

JAMES M. QUICK, M.D., of Muncie, died October 30th, aged fifty-six years. Dr. Quick graduated from the Physio-Medical College of Indiana, at Indianapolis, in 1898. He was a member of the Muncie Academy of Medicine, the Delaware-Blackford County Medical Society, the Indiana State Medical Association and the American Medical Association.

### NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

MEMBERS of the Fort Wayne Medical Society celebrated the seventieth birthday of Dr. Calvin H. English, November 8th.

THE MADISON COUNTY MEDICAL SOCIETY held its meeting November 15, at the Roberts Coffee Shop, Anderson. Dr. Horace Allen, of Indianapolis, presented a paper.

DR. WILLIAM MITHOEFE, of Cincinnati, presented a paper on "Recent Views Concerning the Tonsils" at the meeting of the Muncie Academy of Medicine held November 11 at the Hotel Delaware.

MR. THOMAS A. HENDRICKS, of Indianapolis, and Dr. Albert E. Bulson, Jr., of Fort Wayne,

attended the conference of secretaries and editors held at the American Medical Association offices in Chicago, November 18th and 19th.

DR. G. W. COPELAND, of Versailles, has moved to Vevay, Indiana, where he has joined his brother, Dr. R. M. Copeland, in the practice of medicine. Dr. Copeland suggests that there is a good opening at Versailles for a physician.

THE CHICAGO OPHTHALMOLOGICAL SOCIETY held its meeting at the Cook County Hospital, Chicago, November 21. A clinical meeting was presented by the ophthalmic staff of the Cook County Hospital, Drs. Fitzgerald, Gradle, Moncreiff, Suker and Yerger.

THE TENTH DISTRICT MEDICAL SOCIETY held its meeting at East Chicago, November 17th. Papers were presented by Dr. C. C. Robinson, of Indiana Harbor; Dr. Edward J. Stieglitz, of Chicago; Dr. Vernon David, of Chicago; Dr. Wilbur E. Post, of Chicago, and Dr. William N. Wishard, of Indianapolis.

A GIFT of \$25,000 has been received by the director of the department of Conservation and chairman of the Executive Committee of the Indiana Lincoln Union, for the proposed Lincoln Memorial shrine at Lincoln City. This was the first donation to be received in the campaign for \$1,265,000 for the building of the Memorial.

EVANSVILLE was selected as the 1928 meeting place for the Ohio Valley Medical Association, which was in session in that city November 11th. Dr. R. W. Viehe, Evansville, was elected president; Dr. B. H. Beeler, Evansville, secretary-treasurer; and Dr. J. H. Pirrung, Cincinnati, Ohio; Dr. Robert Moore, Indianapolis, and Dr. G. C. Johnson, Evansville, vice-presidents.

THE Seventh District Medical Society held its meeting at Danville, Indiana, October 25th. Papers were presented by Drs. Edwin N. Kime, of Indianapolis; Albert E. Bulson, Jr., of Fort Wayne; Max Bahr, of Indianapolis; Cleon Nafe, of Indianapolis; Leon G. Zerfas, of Indianapolis, and W. D. Gatch of Indianapolis. Following the dinner, Dr. Granville S. Hanes, of the University of Louisville, presented a paper.

DR. AND MRS. S. P. SCHERER of Martinsville, recently have returned from Memphis, Tennessee, where Dr. Scherer attended the meeting of the Southern Medical Association. He reports that the program was exceptionally good. Twenty-six hundred doctors and wives were registered. A large three million dollar auditorium made a meeting place sufficiently large to house all of the sixteen sections and the exhibits. Most



of the lectures before the sections were accompanied by living patients.

NEW YORK UNIVERSITY has announced the opening of a special clinic and laboratory at the new Sydenham Hospital at 123rd Street and Manhattan Avenue. The clinic is designed to study exclusively cases of asthma, eczema, hives, hay fever and other allergic diseases of children from infancy up to puberty. It is the first of its kind to be established in that this type of disease will be studied in a shorter time and more intensively than ever before. It has been made possible by the gift of thirty thousand dollars by a friend of the university.

THE Indianapolis Ophthalmological and Otolaryngological Society has sent out programs for the meetings of the 1927-1928 season. All meetings will be held at the University Club. Speakers for the meetings will be Dr. Arthur W. Proetz, St. Louis (October 13); Dr. George F. Suker, Chicago (November 10); Dr. Wells P. Eagleton, Newark, N. J. (January 10); Drs. D. A. Bartley and C. P. Clark, Indianapolis (February 9); Dr. E. L. Lingeman, Indianapolis (March 8); Dr. Peter Bassoe, Chicago (April 12), and Drs. Robert J. Masters and J. Kent Leasure, Indianapolis (May 10).

THE United States Civil Service Commission has announced that hospitals of the United States Public Health Service and the Veterans' Bureau throughout the country are in urgent need of laboratorians in bacteriology and roentgenology and that applications for the positions will be rated as received until January 7, 1928. Applicants will not be required to report for examination at any place, but will be rated on their education, training and experience. For full information and application blanks (Form 2374) apply, stating the title of the examination desired, to the secretary of the local board of United States civil service examiners at any first class post office, or to the U. S. Civil service district secretary at Washington, D. C.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

DePree Company

Sulpharsphenamine-DePree — Sulpharsphenamine-DePree, 0.1 Gm. Ampules; Sulpharsphenamine-DePree, 0.15 Gm. Ampules; Sulpharsphenamine-DePree, 0.2 Gm. Ampules; Sulpharsphenamine-DePree, 0.3 Gm. Ampules; Sulpharsphenamine-DePree, 0.4 Gm. Ampules; Sulpharsphenamine-DePree, 0.45 Gm. Ampules; Sulpharsphenamine-DePree, 0.6 Gm. Ampules; Sulpharsphenamine-DePree, 1.0 Gm. Ampules; Sulpharsphenamine-DePree, 3.0 Gm.

Ampules.

Gilliland Laboratories, Inc.

Typhoid Vaccine, 30 Ampule package.

Eli Lilly & Co.

Ephedrine-Lilly — Inhalant Ephedrine Compound-Lilly.

Parke, Davis & Co.

Erysipelas Streptococcus Antitoxin (Refined and Concentrated)—P. D. & C.

E. R. Squibbs & Sons

Scarlet Fever Streptococcus Toxin-Squibb, 5 vial package (500, 2,000, 8,000, 25,000, 60,000 skin test doses). Scarlet Fever Streptococcus Toxin-Squibb, 50 vial package (500, 2,000, 8,000, 25,000, 60,000 skin test doses).

Winthrop Chemical Co.

Mesuirol—Emulsion Mesuirol, 20 per cent.

Nonproprietary Articles

Ephedrine (base).

## SOCIETIES AND INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

Oct. 24, 1927.

Meeting called to order at 4:45 P. M.

Present: Wm. N. Wishard, M.D.; Jas. A. MacDonald, M.D.; Murray N. Hadley, M.D.; Frank W. Cregor, president of the State Association and Thomas A. Hendricks, Executive Secretary.

The minutes of the meeting held October 10 read, corrected and approved.

The Bureau of Publicity approved the statement for the press of the secretary of the State Board of Medical Registration and Examination in regard to the administration of the new amendment to the medical practice act.

The following speaking engagements were filled by the Bureau: Speaker for 11th District Meeting at Delphi, October 20. Speaker for the Tri-County Medical Society meeting upon "Better Obstetrics" North Vernon, October 26.

Letter received from secretary of the 11th District Medical Society thanking the Bureau for filling a last minute vacancy on the 11th district program with a substitute speaker.

Letter received from F. Wehle, M.D., editor of the Physical Examiner, a new publication devoted to the various phases of Periodic Health Examination.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate and as a whole October 31, 1927.

WILLIAM N. WISHARD, M.D.,  
Chairman.

THOMAS A. HENDRICKS,  
Executive Secretary.

### BUREAU OF PUBLICITY

October 31, 1927.

Meeting called to order at 4:45 P. M.

Present: Wm. N. Wishard, M.D.; Murray N. Hadley, M.D.; and Thomas A. Hendricks, Executive Secretary.

The minutes of the meeting held October 24 read, corrected and approved.

The release, "Hoosierland's Health Harvest," for publication November 7, read and approved.

The following notice received from secretary and general manager of the American Medical Association of the Annual Conference of Secretaries of Constituent State

Medical Associations at Chicago, November 18:

"One or two of the constituents state associations are considering the advisability of employing full time secretaries. The present secretaries of these organizations are anxious to have the matter discussed at the Secretaries' Conference to be held here on November 18-19.

"We are not going to put the topic on the program formally, but we are going to bring it up for informal discussion. I shall greatly appreciate it if you will come prepared to tell the story of your own state association as it has been developed since it has had a full time secretary."

(Signed)

OLIN WEST,

American Medical Association.

The Bureau instructed the executive secretary to attend the meeting and be prepared to discuss the activities of the Indiana State Medical Association.

Letter received from secretary of the Shelby County Medical Society stating that the assignment of a speaker to talk before the Morristown Community Club on November 15 will meet with the county society approval. The Bureau instructed the secretary to fill this engagement.

The attention of the Bureau was called to the article, "How One Newspaper Health Column is Made" which appeared in the October bulletin of the American Medical Association.

The following letter was received from the Physical Examiner:

"Thank you very much for your comprehensive reply of October 20 to our recent inquiry on periodic health examinations.

"The enclosures have been very interesting to us, and much of the material will be used in early issues of THE PHYSICAL EXAMINIST. Unquestionably, your state is among the leaders in this important work.

"Your offer of further co-operation is also very much appreciated and is one of which we shall be glad to avail ourselves when the opportunity arises.

"Under separate cover we are sending you a copy of the September issue of the new Journal, so that you may become better acquainted with it and its principles and purposes.

THE PHYSICAL EXAMINIST."

A pamphlet on the Prevention of Disease put out by the Saginaw County Medical Society was reviewed by the Bureau.

The above minutes were approved in each separate part and as a whole, November 7, 1927.

WM. N. WISHARD, M.D.,  
Chairman.

THOMAS A. HENDRICKS,  
Executive Secretary.

#### BUREAU OF PUBLICITY

Nov. 7, 1927.

Meeting called to order at 4:45 P. M.

Present: Wm. N. Wishard, M.D., Chairman; J. A. MacDonald, M.D. by proxy, and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held October 31, read, corrected and approved.

The release on Neuralgia read, corrected and approved.

"The Indiana State Medical Association and the Executive Secretary" (A Report by the Publicity Bureau prepared especially for the 1927 Annual Conference of Secretaries of Constituent State Medical Associations), which is to be held at Chicago, November 19, was reviewed by the Bureau and the secretary was authorized to obtain prices of printing this report.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole November 14, 1927.

WM. N. WISHARD, M.D.,  
Chairman.

THOMAS A. HENDRICKS,  
Executive Secretary.

#### THIRD DISTRICT MEDICAL SOCIETY

Oct. 29, 1927.

The Third District Medical Society met at Lyons Hall, Salem, Ind., October 26, 1927, with H. B. Shacklett, M.D., New Albany, presiding. The first subject on the program was a paper by Bryant F. Horner, M.D., Campbellsburg, on "Renal Colic Without Calculi," a very instructive paper which was well discussed. Granville S. Hanes, M.D., of Louisville, Ky., gave a very interesting and instructive lecture and stereoscopic views on "The Treatment of Pruritis Ani, Pruritis Vulva and Rectal Prolapse by Hypodermic Injection of Hydrochloric Acid." This was thoroughly discussed.

A paper on "Eye Strain, Effects and Remedies" was read by Walter J. Leach, M.D., New Albany. The essayist certainly demonstrated his ability as a specialist in his line by enumerating the different defects, results, and remedies this very complicated and important organ may have. The paper was instructive and enjoyed by all.

The visiting members were all well pleased and feel very grateful to the Washington County Society for their hospitality.

Orange County will entertain the members of the Third District, in May, 1928. Dr. Dillinger, of French Lick, was elected president; Dr. Baker, of Orleans, secretary, for the ensuing year.

W. A. HALL, M.D.,  
Secretary.

#### TIPPECANOE COUNTY MEDICAL SOCIETY

November 21, 1927.

The Tippecanoe County Medical Society held its regular meeting, November 10th, at the Hotel Lahr. It was a joint meeting with the dentists, Vice-President Laws presiding. The application of Dr. Harry E. Klepinger of Lafayette was read the second time and was voted on favorably.

A notice from the secretary of the Goodhue County Medical Society of Minnesota was read, showing the transfer from our society to the Goodhue County Society of Dr. George W. Dewey, formerly of the State Soldiers Home, Lafayette.

The papers of the evening were presented as follows:

The first paper, "Fractures of the Jaws," was read by Paul A. Risk, D.D.S., of Lafayette, Indiana. The paper was illustrated with lantern slides of the appliances used in nineteen rather recent jaw fractures. It was pointed out that both the appliance and procedure should be no more complicated than necessary, and that bandaging is very seldom necessary. It was also stated that usually the patient need be put to little discomfort, for example, where a single fracture is anterior to a sound tooth or teeth one side of the jaw may be splinted to the other so that an ideal result may be obtained without subjecting the injured person to fixation of the mandible to the maxilla. Orthodontic appliances frequently simplify both splinting and the application of intermaxillary ligatures.

The second paper of the evening, "Preventive Dentistry and the X-Ray," was read by Harold J. Risk, D. D. S., of Lafayette, Indiana. It was followed by a series of lantern slides which illustrated his contentions. Dr. Risk stated that ninety per cent of the pulpless teeth can be prevented. Dental caries must be found and checked before the pulps are reached. A new film, the Bite-Wing film, developed by Dr. Howard Raper and manufactured by the Eastman Co., is used to detect cavities between teeth, especially between the posterior teeth.

Dr. Risk shows the simplicity of this interproximal examination system and states that ninety per cent of the new patients receive an interproximal examination at their first appointment. Old patients are called in for prophylaxis and examination, and they receive annual interproximal re-rays. Extremely small cavities between



the teeth can be watched by means of the x-ray. If the annual recheck shows that the decay has progressed into the dentine, these cavities should be filled. Posterior interproximal examination requires but two films and should be within reach of even the poorest people. X-rays are but a matter of education with the patients. The writer also stated that x-rays should be used in locating cavities, cervical calculus, ill-fitting crowns and faulty fillings. These conditions must be remedied before progress can be made in the treatment of Vincent's Infections and Pyorrhea. After the correction of these findings the periodical recheck with the x-ray will show the progress of treatment. X-rays should be consulted whenever possible before extracting any tooth. Operators should always consult the x-rays before extracting third molars. Root canal work likewise must be checked and annually rechecked. Dr. Risk summarizes by saying that he wonders how Preventive Dentistry, "the coming thing," can be practiced without the Dental X-Ray, especially the Interproximal Bite-Wing Film Examination.

Respectfully,  
J. C. BURKLE, M.D.,  
Secretary.

#### TENTH DISTRICT MEDICAL SOCIETY

November 22, 1927.

The meeting of the Tenth District Medical Society was held November 17th, at the Elks' Club Rooms, East Chicago. The members of the society were guests of the East Chicago Medical Society.

Dr. C. C. Robinson, of Indiana Harbor, presented a paper on "Fracture of the Long Bones, Open and Close Reductions, Maintenance of Position, Disability, and Permanent Impairment. The paper was excellent. It stressed the importance of practical functional results in fracture cases over anatomical reductions. Dr. Edward J. Stieglitz, of Chicago, presented a paper on "New Conceptions in the Etiology and Management of Hypertension" which stressed the importance of diet, and of the greatest importance, the elimination of condiments. Alcohol, he believes, plays no important part in the etiology. Circulatory rest is of very great importance. Dr. Vernon David, of Chicago, presented a paper on "Some Phases of Carcinoma of the Rectum" which was well illustrated as to pathology and a description of the technique of operation. The only favorable prognosis in these cases lies in a very early diagnosis. Dr. Wilbur E. Post, of Chicago, in his paper on "Arthritis, Recent Studies in Etiology and Treatment," stressed the point that our present conception is considerably different from that of a few years ago. Dr. William N. Wishard, of Indianapolis, presented a paper on "Surgical Urology" which was excellent in every particular. Instead of trying to cover the whole field of surgical urology he confined his remarks to "Urinary Reflux." Apparently the subject was something few had any knowledge of and proved to be of great interest.

An elaborate dinner was served at 6:30 followed by a scientific program and entertainment by radio. The society voted to hold only one meeting next year because of the fact that the State meeting will be held in Lake County in September, and it was unanimously decided that the meeting next year should be held in the southern part of the district, probably at Hazelton, where George Ade has so kindly placed his estate at the disposal of the society twice before. Respectfully

E. E. EVANS, M.D.,  
Councillor, Tenth District,  
Secretary, protem.

## TRUTH ABOUT MEDICINES

### NEW AND NONOFFICIAL REMEDIES

DIPHTHERIA TOXIN-ANTITOXIN MIXTURE, 0.1 L+ (NEW AND NONOFFICIAL REMEDIES, 1927, p. 341.)—This product is also marketed in packages of 30 bulbs each containing 1 cc., representing ten immunizing treat-

ments. Parke, Davis & Co., Detroit. (*Jour. A. M. A.*, Oct. 1, 1927, p. 1151).

..BROMURAL.—2-monobromisovalerylurea, obtained by the interaction of urea with bromisovaleryl bromide. Bromural is a nerve sedative which produces sleep in mild cases of insomnia without markedly affecting the circulation or respiration. It is claimed to be useful as a nerve sedative and for the purpose of inducing sleep in functional nervous disease. Bromural is not effective in cases of insomnia associated with pain, cough, angina pectoris or delirium. It is supplied in substance and in five grain tablets. E. Bilhuber, Inc., New York. (*Jour. A. M. A.*, October 8, 1927, p. 1251).

ERYSIPELAS STREPTOCOCCUS ANTITOXIN REFINED AND CONCENTRATED P. D. & Co.—An erysipelas streptococcus antitoxin (New and Nonofficial Remedies, 1927, p. 337) prepared by immunizing horses with cultures of streptococcus isolated from erysipelas. The potency of the product is declared in "units," a unit representing the amount of antitoxin required to neutralize one skin test dose of toxin. It is marketed in packages of one piston syringe containing 500,000 units. Parke, Davis & Co., Detroit. (*Jour. A. M. A.*, Oct. 15, 1927, p. 1335).

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of the lectures before the sections were accompanied by living patients.

NEW YORK UNIVERSITY has announced the opening of a special clinic and laboratory at the new Sydenham Hospital at 123rd Street and Manhattan Avenue. The clinic is designed to study exclusively cases of asthma, eczema, hives, hay fever and other allergic diseases of children from infancy up to puberty. It is the first of its kind to be established in that this type of disease will be studied in a shorter time and more intensively than ever before. It has been made possible by the gift of thirty thousand dollars by a friend of the university.

THE Indianapolis Ophthalmological and Otolaryngological Society has sent out programs for the meetings of the 1927-1928 season. All meetings will be held at the University Club. Speakers for the meetings will be Dr. Arthur W. Proetz, St. Louis (October 13); Dr. George F. Suker, Chicago (November 10); Dr. Wells P. Eagleton, Newark, N. J. (January 10); Drs. D. A. Bartley and C. P. Clark, Indianapolis (February 9); Dr. E. L. Lingeman, Indianapolis (March 8); Dr. Peter Bassoe, Chicago (April 12), and Drs. Robert J. Masters and J. Kent Leasure, Indianapolis (May 10).

THE United States Civil Service Commission has announced that hospitals of the United States Public Health Service and the Veterans' Bureau throughout the country are in urgent need of laboratorians in bacteriology and roentgenology and that applications for the positions will be rated as received until January 7, 1928. Applicants will not be required to report for examination at any place, but will be rated on their education, training and experience. For full information and application blanks (Form 2374) apply, stating the title of the examination desired, to the secretary of the local board of United States civil service examiners at any first class post office, or to the U. S. Civil service district secretary at Washington, D. C.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

#### DePree Company

Sulpharsphenamine-DePree — Sulpharsphenamine-DePree, 0.1 Gm. Ampules; Sulpharsphenamine-DePree, 0.15 Gm. Ampules; Sulpharsphenamine-DePree, 0.2 Gm. Ampules; Sulpharsphenamine-DePree, 0.3 Gm. Ampules; Sulpharsphenamine-DePree, 0.4 Gm. Ampules; Sulpharsphenamine-DePree, 0.45 Gm. Ampules; Sulpharsphenamine-DePree, 0.6 Gm. Ampules; Sulpharsphenamine-DePree, 1.0 Gm. Ampules; Sulpharsphenamine-DePree, 3.0 Gm.

Ampules.

Gilliland Laboratories, Inc.

Typhoid Vaccine, 30 Ampule package.

Eli Lilly & Co.

Ephedrine-Lilly — Inhalant Ephedrine Compound-Lilly.

Parke, Davis & Co.

Erysipelas Streptococcus Antitoxin (Refined and Concentrated)—P. D. & C.

E. R. Squibbs & Sons

Scarlet Fever Streptococcus Toxin-Squibb, 5 vial package (500, 2,000, 8,000, 25,000, 60,000 skin test doses). Scarlet Fever Streptococcus Toxin-Squibb, 50 vial package (500, 2,000, 8,000, 25,000, 60,000 skin test doses).

Winthrop Chemical Co.

Mesuroil—Emulsion Mesuroil, 20 per cent.

Nonproprietary Articles

Ephedrine (base).

## SOCIETIES AND INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

Oct. 24, 1927.

Meeting called to order at 4:45 P. M.

Present: Wm. N. Wishard, M.D.; Jas. A. MacDonald, M.D.; Murray N. Hadley, M.D.; Frank W. Cregor, president of the State Association and Thomas A. Hendricks, Executive Secretary.

The minutes of the meeting held October 10 read, corrected and approved.

The Bureau of Publicity approved the statement for the press of the secretary of the State Board of Medical Registration and Examination in regard to the administration of the new amendment to the medical practice act.

The following speaking engagements were filled by the Bureau: Speaker for 11th District Meeting at Delphi, October 20. Speaker for the Tri-County Medical Society meeting upon "Better Obstetrics" North Vernon, October 26.

Letter received from secretary of the 11th District Medical Society thanking the Bureau for filling a last minute vacancy on the 11th district program with a substitute speaker.

Letter received from F. Wehle, M.D., editor of the Physical Examiner, a new publication devoted to the various phases of Periodic Health Examination.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate and as a whole October 31, 1927.

WILLIAM N. WISHARD, M.D.,  
Chairman.

THOMAS A. HENDRICKS,  
Executive Secretary.

### BUREAU OF PUBLICITY

October 31, 1927.

Meeting called to order at 4:45 P. M.

Present: Wm. N. Wishard, M.D.; Murray N. Hadley, M.D.; and Thomas A. Hendricks, Executive Secretary.

The minutes of the meeting held October 24 read, corrected and approved.

The release, "Hoosierland's Health Harvest," for publication November 7, read and approved.

The following notice received from secretary and general manager of the American Medical Association of the Annual Conference of Secretaries of Constituent State

Medical Associations at Chicago, November 18:

"One or two of the constituents state associations are considering the advisability of employing full time secretaries. The present secretaries of these organizations are anxious to have the matter discussed at the Secretaries' Conference to be held here on November 18-19.

"We are not going to put the topic on the program formally, but we are going to bring it up for informal discussion. I shall greatly appreciate it if you will come prepared to tell the story of your own state association as it has been developed since it has had a full time secretary."

(Signed)

OLIN WEST,  
American Medical Association.

The Bureau instructed the executive secretary to attend the meeting and be prepared to discuss the activities of the Indiana State Medical Association.

Letter received from secretary of the Shelby County Medical Society stating that the assignment of a speaker to talk before the Morristown Community Club on November 15 will meet with the county society approval. The Bureau instructed the secretary to fill this engagement.

The attention of the Bureau was called to the article, "How One Newspaper Health Column is Made" which appeared in the October bulletin of the American Medical Association.

The following letter was received from the Physical Examiner:

"Thank you very much for your comprehensive reply of October 20 to our recent inquiry on periodic health examinations.

"The enclosures have been very interesting to us, and much of the material will be used in early issues of THE PHYSICAL EXAMINIST. Unquestionably, your state is among the leaders in this important work.

"Your offer of further co-operation is also very much appreciated and is one of which we shall be glad to avail ourselves when the opportunity arises.

"Under separate cover we are sending you a copy of the September issue of the new Journal, so that you may become better acquainted with it and its principles and purposes.

THE PHYSICAL EXAMINIST."

A pamphlet on the Prevention of Disease put out by the Saginaw County Medical Society was reviewed by the Bureau.

The above minutes were approved in each separate part and as a whole, November 7, 1927.

WM. N. WISHARD, M.D.,  
Chairman.  
THOMAS A. HENDRICKS,  
Executive Secretary.

#### BUREAU OF PUBLICITY

Nov. 7, 1927.

Meeting called to order at 4:45 P. M.

Present: Wm. N. Wishard, M.D., Chairman; J. A. MacDonald, M.D. by proxy, and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held October 31, read, corrected and approved.

The release on Neuralgia read, corrected and approved. "The Indiana State Medical Association and the Executive Secretary" (A Report by the Publicity Bureau prepared especially for the 1927 Annual Conference of Secretaries of Constituent State Medical Associations), which is to be held at Chicago, November 19, was reviewed by the Bureau and the secretary was authorized to obtain prices of printing this report.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole November 14, 1927.

WM. N. WISHARD, M.D.,  
Chairman.  
THOMAS A. HENDRICKS,  
Executive Secretary.

#### THIRD DISTRICT MEDICAL SOCIETY

Oct. 29, 1927.

The Third District Medical Society met at Lyons Hall, Salem, Ind., October 26, 1927, with H. B. Shacklett, M.D., New Albany, presiding. The first subject on the program was a paper by Bryant F. Horner, M.D., Campbellsburg, on "Renal Colic Without Calculi," a very instructive paper which was well discussed. Granville S. Hanes, M.D., of Louisville, Ky., gave a very interesting and instructive lecture and stereoscopic views on "The Treatment of Pruritis Ani, Pruritis Vulva and Rectal Prolapse by Hypodermic Injection of Hydrochloric Acid." This was thoroughly discussed.

A paper on "Eye Strain, Effects and Remedies" was read by Walter J. Leach, M.D., New Albany. The essayist certainly demonstrated his ability as a specialist in his line by enumerating the different defects, results, and remedies this very complicated and important organ may have. The paper was instructive and enjoyed by all.

The visiting members were all well pleased and feel very grateful to the Washington County Society for their hospitality.

Orange County will entertain the members of the Third District, in May, 1928. Dr. Dillinger, of French Lick, was elected president; Dr. Baker, of Orleans, secretary, for the ensuing year.

W. A. HALL, M.D.,  
Secretary.

#### TIPPECANOE COUNTY MEDICAL SOCIETY

November 21, 1927.

The Tippecanoe County Medical Society held its regular meeting, November 10th, at the Hotel Laehr. It was a joint meeting with the dentists, Vice-President Laws presiding. The application of Dr. Harry E. Klepinger of Lafayette was read the second time and was voted on favorably.

A notice from the secretary of the Goodhue County Medical Society of Minnesota was read, showing the transfer from our society to the Goodhue County Society of Dr. George W. Dewey, formerly of the State Soldiers Home, Lafayette.

The papers of the evening were presented as follows:

The first paper, "Fractures of the Jaws," was read by Paul A. Risk, D.D.S., of Lafayette, Indiana. The paper was illustrated with lantern slides of the appliances used in nineteen rather recent jaw fractures. It was pointed out that both the appliance and procedure should be no more complicated than necessary, and that bandaging is very seldom necessary. It was also stated that usually the patient need be put to little discomfort, for example, where a single fracture is anterior to a sound tooth or teeth one side of the jaw may be splinted to the other so that an ideal result may be obtained without subjecting the injured person to fixation of the mandible to the maxilla. Orthodontic appliances frequently simplify both splinting and the application of intermaxillary ligatures.

The second paper of the evening, "Preventive Dentistry and the X-Ray," was read by Harold J. Risk, D. D. S., of Lafayette, Indiana. It was followed by a series of lantern slides which illustrated his contentions. Dr. Risk stated that ninety per cent of the pulpless teeth can be prevented. Dental caries must be found and checked before the pulps are reached. A new film, the Bite-Wing film, developed by Dr. Howard Raper and manufactured by the Eastman Co., is used to detect cavities between teeth, especially between the posterior teeth.

Dr. Risk shows the simplicity of this interproximal examination system and states that ninety per cent of the new patients receive an interproximal examination at their first appointment. Old patients are called in for prophylaxis and examination, and they receive annual interproximal re-rays. Extremely small cavities between



the teeth can be watched by means of the x-ray. If the annual recheck shows that the decay has progressed into the dentine, these cavities should be filled. Posterior interproximal examination requires but two films and should be within reach of even the poorest people. X-rays are but a matter of education with the patients. The writer also stated that x-rays should be used in locating cavities, cervical calculus, ill-fitting crowns and faulty fillings. These conditions must be remedied before progress can be made in the treatment of Vincent's Infections and Pyorrhea. After the correction of these findings the periodical recheck with the x-ray will show the progress of treatment. X-rays should be consulted whenever possible before extracting any tooth. Operators should always consult the x-rays before extracting third molars. Root canal work likewise must be checked and annually rechecked. Dr. Risk summarizes by saying that he wonders how Preventive Dentistry, "the coming thing," can be practiced without the Dental X-Ray, especially the Interproximal Bite-Wing Film Examination.

Respectfully,  
J. C. BURKLE, M.D.,  
Secretary.

#### TENTH DISTRICT MEDICAL SOCIETY

November 22, 1927.

The meeting of the Tenth District Medical Society was held November 17th, at the Elks' Club Rooms, East Chicago. The members of the society were guests of the East Chicago Medical Society.

Dr. C. C. Robinson, of Indiana Harbor, presented a paper on "Fracture of the Long Bones, Open and Close Reductions, Maintenance of Position, Disability, and Permanent Impairment. The paper was excellent. It stressed the importance of practical functional results in fracture cases over anatomical reductions. Dr. Edward J. Stieglitz, of Chicago, presented a paper on "New Conceptions in the Etiology and Management of Hypertension" which stressed the importance of diet, and of the greatest importance, the elimination of condiments. Alcohol, he believes, plays no important part in the etiology. Circulatory rest is of very great importance. Dr. Vernon David, of Chicago, presented a paper on "Some Phases of Carcinoma of the Rectum" which was well illustrated as to pathology and a description of the technique of operation. The only favorable prognosis in these cases lies in a very early diagnosis. Dr. Wilbur E. Post, of Chicago, in his paper on "Arthritis, Recent Studies in Etiology and Treatment," stressed the point that our present conception is considerably different from that of a few years ago. Dr. William N. Wishard, of Indianapolis, presented a paper on "Surgical Urology" which was excellent in every particular. Instead of trying to cover the whole field of surgical urology he confined his remarks to "Urinary Reflux." Apparently the subject was something few had any knowledge of and proved to be of great interest.

An elaborate dinner was served at 6:30 followed by a scientific program and entertainment by radio. The society voted to hold only one meeting next year because of the fact that the State meeting will be held in Lake County in September, and it was unanimously decided that the meeting next year should be held in the southern part of the district, probably at Hazelton, where George Ade has so kindly placed his estate at the disposal of the society twice before. Respectfully

E. E. EVANS, M.D.,  
Councilor, Tenth District,  
Secretary, protem.

### TRUTH ABOUT MEDICINES

#### NEW AND NONOFFICIAL REMEDIES

DIPHTHERIA TOXIN-ANTITOXIN MIXTURE, 0.1 L+ (NEW AND NONOFFICIAL REMEDIES, 1927, p. 341.)—This product is also marketed in packages of 30 bulbs each containing 1 cc., representing ten immunizing treat-

ments. Parke, Davis & Co., Detroit. (*Jour. A. M. A.*, Oct. 1, 1927, p. 1151).

BROMURAL.—2-monobromisovalerylurea, obtained by the interaction of urea with bromisovaleryl bromide. Bromural is a nerve sedative which produces sleep in mild cases of insomnia without markedly affecting the circulation or respiration. It is claimed to be useful as a nerve sedative and for the purpose of inducing sleep in functional nervous disease. Bromural is not effective in cases of insomnia associated with pain, cough, angina pectoris or delirium. It is supplied in substance and in five grain tablets. E. Bilhuber, Inc., New York. (*Jour. A. M. A.*, October 8, 1927, p. 1251).

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## TRUTH ABOUT MEDICINES

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is asked to use the firm's "Reliable Remedy for Epilepsy" and is told by the firm that it does not "feel justified" in exposing its formula—that is, the medical profession is asked to prescribe a preparation of secret composition. The A. M. A. Chemical Laboratory analyzed the ARC Epilepsy Remedy and found it to consist of capsules, each containing about 1½ grains of phenobarbital (luminal) and a considerable amount of laxative (emodin-bearing) drug and a small amount of dye. Is it possible that there are physicians who are so gullible and forgetful of their duty to their patients that they will give a dangerous drug in unknown dosage? A physician who uses or prescribes "ARC Epilepsy Remedy," giving so dangerous a drug as phenobarbital in unknown dosage, may lay himself open to a charge of doubtful practice. (*Jour. A. M. A.*, October 1, 1927, p. 1167).

ASTHMOLYSIN.—Asthmolysin is, according to the advertising, "a combination of the suprarenal and pituitary hormones in distinct proportions," prepared by a "special method." There appears to be no scientific evidence to warrant the use of pituitary in bronchial asthma. Epinephrine is frequently used in some forms of asthma, but may be had pure and need not be prescribed in a secret preparation containing an undetermined amount. The 1927 Asthmolysin circular consists of testimonials from 121 physicians, of whom 35 are Fellows and 33 are members of the American Medical Association, while 53 are neither members nor Fellows. Such testimonials, given for a semi-secret preparation of unscientific character, are no credit to those members of the supposedly learned profession that gave them. (*Jour. A. M. A.*, October 1, 1927, p. 1170).

CONCENTRATED ORCHITIC SOLUTION (ORCHITIC SUBSTANCE CONCENTRATED-COUSINEAU) NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Concentrated Orchitic Substance Concentrated (Cousineau), is marketed by the California Endocrine Foundation Laboratories, Long Beach, California. According to the label on the specimen it is "A Preparation of Orcho-Plasm Ramm Derivative" while in an advertising booklet it is stated that it "consists of the small, hard, testicular gland of the healthy, young, live Goat, Ram or Monkey," and "contains saturation of the whole gland substance in solution ideally compounded." The Council found that many unwarranted and unsupported claims were made for the preparation and, hence, declared it inadmissible to New and Nonofficial Remedies. When the Council's statement was sent the California Endocrine Foundation Laboratories, the firm submitted a proposed revision of an advertising booklet. In the advertising the general impression is given that gland implants such as those of Voronoff are highly effective, and that the manufacturer's product, administered hypodermically, will give equal good or better results. Even if the proposed revision of claims is made, the preparation is still unacceptable for the reason that the manufacturer has not submitted any scientific evidence for the therapeutic usefulness and efficacy of the product. The Council, therefore, declared Concentrated Orchitic Solution (Orchitic Substance Concentrated-Cousineau) unacceptable for New and Nonofficial Remedies. (*Jour. A. M. A.*, October 8, 1927, p. 1267).

THE A-MOY ANTI-FAT FAKE.—The A-Moy Company is a trade name used by one Charles E. Cessna, of whom the Chicago Tribune once said, he "at different times in his business career has been a loan shark, patent medicine vendor, and land promotor." Cessna's present anti-fat quackery consists in selling A-Moy Reducing Pills, which, according to a report, have been responsible for at least one death. (*Jour. A. M. A.*, October 8, 1927, p. 1267).



**LIVER DIET IN ANEMIA.**—While liver seems to be presenting increasing evidence of its value in the treatment of anemia, physicians everywhere are finding it difficult to keep patients contented and happy while they are taking it. This state of affairs is due partly to the fact that few people can cook liver in any other way than by frying. Recipes taken from English and French sources include many ways of preparing liver for the table. (*Jour. A. M. A.* October 15, 1927, p. 1335).

**FEVER-PRODUCING METHODS IN TREATMENT OF GENERAL PARALYSIS.**—Compilations have been made of the results obtained in cases of general paralysis treated with malaria. The treatment has also been applied to patients with syphilis of the central nervous system. A microscopic study of the brain following treatment by malaria leads to the conclusion on the part of the investigator that in some cases in the future the term "recovery" rather than "remission" will be justified. Relatively little has been reported during the past year concerning relapsing fever or sodoku as a therapeutic measure in neurosyphilis. It seems likely that, if infectious disease methods are to persist, a contest might arise between malaria and sodoku. Possibly the inoculation with an infectious disease will not continue to be necessary in the production of therapeutic fever. Reports have been published on the production of fever for treatment in general paralysis by the use of injections of foreign protein. The method has many advantages and the few cases on record give promise of good results. (*Jour. A. M. A.*, October 15, 1927, p. 1337).

**PERUNA—ANCIENT AND MODERN.**—The Eighteenth Amendment gave a great stimulus to one branch of the "patent medicine" industry—that devoted to the exploitation of alcoholics sold under the guise of home remedies. Originally containing about 27 per cent of alcohol and very little else, the use of Peruna as a beverage in those parts of the country that were at that time nominally "dry" was notorious. Cases of acute and chronic alcoholism, and even, in some cases, of death from its use are matters of record. In 1905 the sale of Peruna to Indians was prohibited. In the same year the Bureau of Internal Revenue classed Peruna as an alcoholic compound advertised and sold as a medicine, but without the addition of drugs in sufficient quantity to change materially the character of the alcoholic liquor. Then the formula of Peruna was changed and sufficient senna added to satisfy the Internal Revenue Department that Peruna could no longer be used for beverage purposes. At that time the alcohol content was cut down from 27 per cent to 20 per cent. When national prohibition was enacted, the alcohol content of Peruna was further reduced to 12 per cent. Now, within the past few months, another change has taken place. The manufacturers have added 6 per cent alcohol and have taken out the senna! They have also taken out golden seal, which for some years has been one of the alleged ingredients; on the other hand they have added wild cherry, gentian and potassium iodide. The theory under which alcoholic "patent medicines" are supposed to be tolerated by the Internal Revenue Department is that they shall contain the minimal amount of alcohol possible. Just why the manufacturers of a nostrum with a history behind it such as Peruna should have been permitted to increase the alcohol content of their preparation 33 per cent is another of those mysteries that only government bureaus can explain. (*Jour. A. M. A.*, October 22, 1927, p. 1444).

**CARL C. LANTZ—QUACK.**—For many years Carl C. Lantz of New York City and Atlantic Highlands, N. J. has been quacking it through the mails. The *Cosmopolitan Magazine* for July, 1906, contained an advertisement for "The Adonis," sold at that time by Mr. Lantz who was trading as the Lantz-Adonis Co. in New York City. The Adonis was said to preserve and increase mental, physical and genital vigor. *Vanity Fair* for April, 1916, contained an advertisement of four nostrums put out by Lantz, who at that time operated under the trade name

of C. C. Lantz Laboratories. The preparations were "Lantz Face Balm," "Lantz Hair Life," "Lantz Foot Tingle," and "Lantz Riggs Remedy." In 1918 he offered "Lantz Absorbent Pastilles" which were sold as "the modern remedy for the prostate gland, the seat of sexual weakness." He also offered the "Lantz Supporter" and his "Vacuum Congestor" a device alleged to be sold as "a means to develop, strengthen and enlarge shrunken or naturally small organs." On October 10, 1927, the Postmaster General issued a fraud order against Carl C. Lantz covering both the New York and the Atlantic Highlands, N. J. addresses. (*Jour. A. M. A.*, October 29, 1927, p. 1534.)

**DI-CITURIN.**—In an advertising circular this product is said to be "Mono Potassium Diacetyl Citrate" and claims are made for its action that by no stretch of even a lively imagination could seem to be inherent in a substance of such composition. The report of thirty cases of hypertension given in the advertising is far from being sufficiently detailed or extensive to be convincing. In vain one looks for Di-Citurin among the agents described in New and Nonofficial Remedies. This may be taken to mean that it is unacceptable to the Council or Pharmacy and Chemistry, or that it had not yet been submitted to or passed on by the Council. In either case it is well for the physician to refrain from using it until it has been passed by the Council. (*Jour. A. M. A.*, October 29, 1927, p. 1537).

## ABSTRACTS

### PERNICIOUS ANEMIA

By testing the effect of different serums on the growth of seedlings, David I. Macht, Baltimore (*Journal A. M. A.*, Sept. 3, 1927), was able to show that a distinct toxicity can be demonstrated in cases of serums from pernicious anemia cases. This phytotoxic property of pernicious anemia serum is not shown by blood specimens from various other blood diseases, and is in this way useful as an aid in the differential diagnosis of this condition. Irradiations of the pernicious anemia serum with ultraviolet rays in quartz containers renders the serum less toxic, and that effect can be increased by the addition of certain phytodynamic sensitizers in the laboratory. The phytotoxic reaction has been used in following a limited number of cases under various forms of treatment, and the decrease in toxicity was found to be unparalleled to the improvement in the general condition of the patient. In regard to the results obtained concerning the various methods of treatment, a comparative study of the figures so far on hand indicates that all methods of treatment are followed by more or less improvement, for various periods of time. It would seem, however, that the most promising procedures are liver diet, and irradiation with ultraviolet rays plus the use of innocuous sensitizers, such as tetrabromfluorescein or eosin. Perhaps the most desirable method of treatment would logically be a combination of the two, and this, in fact, in the limited number of cases studied, gave the greatest decrease in the toxicity of the serums, and also the most rapidly attained results.

### STANDARDS IN ROENTGENOLOGY

P. M. Hickey, Ann Arbor, Mich. (*Journal A. M. A.*, Sept. 3, 1927), pleads for greater uniformity in teaching roentgenology to undergraduate students; and that roentgenologists make a determined effort to require a higher standard of qualifications in those practicing this specialty; that a more uniform type of roentgen-ray reports be established in clinics and hospitals, and that a standard nomenclature be adopted for the purpose of clarifying the literature.

### CONGENITALLY ABSENT GALLBLADDER

Meyer Golob, New York (*Journal A. M. A.*, Aug. 27, 1927), reports the case of a woman, aged 59, who for four years had suffered from an explosive type of belch-



ing, constant pressure in the epigastrium, and pyrosis with its characteristic sodium bicarbonate habit. The physical observations were essentially negative. Biliary drainage by the Meltzer-Lyon method was made at two different times. In each instance it produced about 20 cc. of light colored bile, free of any micromacroscopic evidence of a pathologic condition. Repeated stimulation with magnesium sulphate met no response. On cholecystography, a shadow of the gallbladder could not be seen, though the patient did not vomit the dye and no undissolved capsules were visible. At the operation, in spite of most painstaking search with a Candron light, no gallbladder could be found. This case emphasizes what may be termed the diagnostic parallelism between the absence of B bile from the aspirates and the absence of the shadow from the cholecystograms. No gallbladder, hence no shadow, no B bile.

#### MANAGEMENT OF CANCER OF BREAST

Since the greatest danger to life lies in delay, and since the reason for delay is usually the patient's fear of the dangerous and crippling operation, Arthur W. Erskine, Cedar Rapids, Iowa (*Journal A. M. A.*, Oct. 22, 1927), is convinced that a tremendous advantage can be gained in the way of advancing the time of surgical relief by abandoning the radical operation, and substituting for it simple amputation of the breast with subsequent roentgen-ray treatment. It is not easy to persuade a woman, before a positive diagnosis can be made, to submit to a procedure as extensive and mutilating as the average block dissection of the axilla. On the other hand, almost any woman is willing to sacrifice a breast if she knows that she can be out of the hospital in less than a week; that she will have no impairment of function of her arm and shoulder, and that her chances for recovery are at least four times what they will be if she waits until a definite diagnosis can be made clinically. Available statistics show that patients who do not receive postoperative roentgenray therapy live about as long as the ones who are treated. Probably a more nearly correct interpretation of the statistics is that the lives of such patients are extended by irradiation to approximately the same length as those for whom postoperative treatment is deemed unnecessary. In the early cases, the usefulness of preoperative irradiation is somewhat neutralized by the danger that some patients may refuse or postpone operation in the hope that the shrinking of the tumor, following the first large dose of rays, indicates that the cancer has been destroyed. Unless the physician has the entire confidence of the patient, it is advisable either to admit preoperative treatment or to operate immediately after its completion, without waiting for the size of the tumor to diminish. In advanced cases, his objection to preoperative treatment does not apply, and its use should be strongly urged. In a considerable number of cases of this class, roentgen-ray therapy is followed by disappearance of the glandular metastases and definite shrinking of the tumor.

#### BLUEBERRY LEAF EXTRACT

Myrtillin, a substance of unknown nature and composition, which occurs in all green plants, especially the blueberry and various myrtles, supposedly has a physiologic function in the normal carbohydrate metabolism of plants and perhaps of animals. It is not insulin or a substitute for insulin, but it exerts some positive and easily demonstrates influences in normal and depancreatized dogs. Animal experiments probably constitute the most rigorous objective test that can be applied to a diabetic remedy, and Frederick M. Allen, Morristown, N. J. (*Journal A. M. A.*, Nov. 5, 1927), believes that the striking and uniform benefits in diabetic dogs justified the trial of myrtillin in human beings. The advantages of myrtillin are that it can be taken by mouth, it is harmless under all conditions, and instead of causing hypoglycemia it tends rather to prevent it. These are qualities which will appeal strongly to patients and also to physicians; and another advantage for the general practi-

tioner is that most of the cases treated by him belong in the milder group which, on the whole, react most favorably to myrtillin. There are, however, the disadvantages that myrtillin in general is feeble and uncertain as compared with insulin. It is useless against acidosis or infections, and it should not be given to glycosuric patients in the expectation of seeing the sugar clear up as it does under such a powerful agency as insulin. It is best to abolish glycosuria and hyperglycemia by the necessary preliminary measures, and then to give myrtillin as a means of gradually raising tolerance or reducing insulin. A considerable proportion of failures must be expected, especially in the severest cases and in young patients. The favorable results, when obtained, are more lasting and tend more in the direction of cure than those of any method heretofore known under any diabetic treatment. Exceptional patients have been relieved of insulin dosage ranging above 50 units daily, and have also discontinued weighing their diet. As a rule, only smaller degrees of benefit are to be expected, and exaggerated hopes should be discouraged. Allen's belief, after two years of investigation, is that myrtillin plays some accessory part in carbohydrate metabolism, and that if properly used it will prove valuable as an accessory factor in diabetic treatment.

#### GENERAL PARALYSIS

In the series of cases reported on by M. M. Kunde, George W. Hall and F. J. Gerty, Chicago (*Jour. A. M. A.*, October 15, 1927), each patient received one or two courses of treatment. Each course consists of a series of from eighteen to twenty-three intravenous injections of foreign protein in the form of typhoid combined vaccine (administered every second or third day) sufficient in quantity to produce a chill followed by fever with a fastigium of from 103 to 104 F. (rectally). The vaccine is diluted with physiologic sodium chloride solution, so that each cubic centimeter of the dilution contains 200 million dead. Among the forty-nine cases, no refractory patients were found. In the majority of instances an increment of 100 million dead bacilli per dose is sufficient to elicit the desired effect, so that on the eighteenth treatment the patient receives an intravenous dose of 1,800 million dead bacilli. One patient required 2,300 million bacilli for the eighteenth dose; another on the eighteenth required only 700 million. After a two months' interval, a second course of treatments may be instituted. At this time the same severe reaction can be elicited by a dose of 50 million bacilli as was produced by the initial dose of the first course. The successive increments in dosages necessary for a reaction in the second course are comparable to those of the first course. Seven patients have already received a second course of treatment. These showed very little, if any, clinical improvement at the end of the first course. During the interval, a slight or pronounced improvement in mental symptoms occurred, and in all cases there was an unusual gain in body weight. Mental improvements continue in six of these following the second course. The seventh patient is rapidly deteriorating. In the forty-nine unselected cases thus treated, twenty-one good remissions followed; these patients are restored to their former social conditions or are working at their previous occupations. Eight of the forty-nine are dead. The causes of death were: pneumonia, suicide, delirium tremens, and rapid deterioration. The authors do not advocate the use of this treatment in moribund patients.

#### OVARIAN THERAPY

WILLIAM P. GRAVES, Boston (*Jour. A. M. A.*, October 15, 1927), regards ovarian substance as being a near-specific in the treatment of hot flashes and the vasomotor disturbance of the menopause. It is ineffective in permanent amenorrhea with hypoplasia, but is useful in certain conditions of menstrual deficiency. It is ineffective in the treatment of menorrhagias and metrorrhagias. It is occasionally useful in cases of essential dysmenorrhea



not associated with marked hypoplasia, and is frequently successful in treating the moliminal symptoms of dysmenorrhoea. In the treatment of sterility, instances of pregnancy following ovarian therapy are sufficiently common to suggest that in certain cases of deficient ovulation ovarian therapy may effect a cure. Preparations of the whole ovary or the ovarian residue are more efficacious than those of the corpus luteum alone, since they contain the more highly potent hormone from the follicle apparatus and are free from the toxic and inhibitory elements that contaminate the corpus luteum. Fresh gland preparations are imperative. There is sufficient clinical and experimental evidence to encourage the hope, that ovarian extracts, now admittedly feeble and inconstant in their action, will under the direction of research be produced of such potency as to be of constant specific value in the treatment of a limited number of functional pelvic disorders.

#### HEMOLYTIC STREPTOCOCCUS CARRIERS

Strains of hemolytic streptococci from eight persons who had recovered from or were convalescing from typical scarlet fever have been studied by Mary B. Kirkbride and Mary W. Wheeler, Albany, N. Y. (*Journal A. M. A.*, Oct. 22, 1927). These strains were isolated from throat cultures taken from thirty days to six months after the onset of the disease. Six of the persons were apparently healthy. One was still convalescent after forty days, while the eighth had recovered from scarlet fever but was ill with influenza at the time the culture was taken. According to intracutaneous tests on goats, of these eight strains, five, isolated from forty days to six months after the onset of the disease, produced potent toxins neutralized by the authors' standard scarlet fever antistreptococcus goat serum (Dochez). Broth filtrates of the other three strains, isolated from thirty days to three months after the onset of the disease, induced reactions only in very low dilutions. These toxins were not completely neutralized by the serum. In the case of six of these convalescent carriers, no evidence could be obtained that they were the source of infection for any other cases of scarlet fever. The histories of the other two carriers, however, are of special interest since there is a definite indication that other persons developed scarlet fever as a result of contact with them.

#### JUVENILE DELINQUENT

Joseph McIver, Philadelphia (*Journal A. M. A.*, Nov. 5, 1927), stresses the point that too much attention has been paid to teaching the delinquent with books and not enough to teaching him to work with hands. When it is definitely proved that the delinquent will necessarily have to earn his living by manual work, the earlier he is given manual training, the greater will be the chances for success. The serious type of delinquent belonging to the manual training class should be taught a trade that is complete. He should at least be able to earn his living, and should know his trade well enough to hold a job as an efficient workman. McIver believes "that we have undoubtedly drifted too far away from the trade school and apprenticeship. In the mad rush for higher education we have lost sight of those boys and girls who are not able to keep up in their studies of books; for a certain percentage of the population to know how to do some kind of manual work in an efficient manner is certainly just as essential to civilization as college education. We undoubtedly need more skilled workmen, and all of our workmen need to be more skilled. If the delinquent could be taught to work efficiently, in such a manner that he could be classed as good or expert in his line and could hold a job of some consequence, so that there would be a demand for his services and little likelihood of his being discharged for inefficiency or incapability, then he would be kept busy at legitimate business that would reward him with money and position. He and his family would be provided for, and there would be some very good reason for his maintaining an interest in his work, his family and society. He would

not be reduced to idleness, poverty, want, shame, loss of self-respect, and criminality." The delinquent who has mental ability will profit greatly by an adjunct course of manual training. In addition to learning something worth while, he will be kept busy at legitimate work and it will help to develop his body. The delinquent child should be kept busy, and the manual training course in addition to his regular studies makes a valuable adjunct. These boys and girls should be kept under custodial care until they know how to work and they should be subjected to a careful study with a complete review of all records by competent workers before they are sent out to a position. The present system of handling the delinquent is ineffective. To send delinquent boys or girls away to a reform school for a few months, or a year or two, as a method of punishment, and expect them to come out reformed is certainly extreme optimism. It serves in many instances only further to unbalance an already unstable and disgruntled individual, who will learn more criminal practices through association, and who will dislike society all the more. A training school should certainly be a place where these children can be taught to be self-supporting, law respecting and God fearing citizens, and if they have to go there, then they should not be discharged or paroled until they have at least learned these essentials.

#### CANCER OF TONGUE

WILLIAM H. SCHMIDT, Philadelphia (*Jour. A. M. A.*, October 15, 1927), favors the electrothermic method of treatment of cancer of the tongue because it has opened the way for the relief of many formerly inoperable cases. Success or failure depends entirely on the treatment of the glands of the neck, irradiation, without surgical removal, being the method of choice.

#### BOOK REVIEWS

BACTERIOLOGY. By William W. Ford, M. D., Professor of Bacteriology, School of Hygiene and Public Health, Lecturer on Hygiene, School of Medicine, Johns Hopkins University; Member State Department of Health of Maryland. Cloth. Price \$8.50. W. B. Saunders & Company, Philadelphia and London, 1927.

The author of this textbook frankly states that to select from the countless species described in the literature on bacteriology those particular organisms which should be retained and made the basis for future investigation has proved to be a discouraging and almost hopeless task. Therefore, in this textbook on bacteriology he has made an attempt to give complete and accurate descriptions of the micro-organisms commonly encountered in medicine, comparative pathology, and hygiene and public health. The book is not intended to present systematic bacteriology in its entirety. In fact, the author believes that it is doubtful if any system of bacteriology could be made satisfactory in the present state of confusion. He has, however, given special emphasis to the descriptions of the pathogenic organisms responsible for disease in man and animals, and he discusses at some length the anaerobic bacteria which have proved to be of such importance in infectious processes or which are responsible for many of the decompositions of milk and foods. The principle aerobic spore-bearing species likewise have been included, chiefly because of the importance they possess for the modern hygienist. An attempt has been made to give an adequate discussion of our present knowledge of the spirochetes. The significance of these organisms in disease production and the lack of any satisfactory discussion of them in current textbooks on bacteriology are ample justification for this endeavor. For much the same reasons the infectious agents of undetermined character, the so-called filtrable viruses, have been considered in detail.



The method and technique of bacteriology have been included, and the subject of infection and immunity has been discussed with the idea of outlining our present views as they explain infectious processes. A notable feature of this book is the many free-hand drawings which give details of structure that are impossible to attain with photographs. These drawings have been made to scale and add very materially to the elucidation of the text. It is a worthy addition to numerous textbooks on bacteriology and works of similar character.

**A TEXTBOOK OF MEDICINE.** By 130 American Authors, edited by Russell L. Cecil, M. D., assistant professor of Clinical Medicine, Cornell University Medical School, New York. 1500 pages, illustrated. Cloth. Price \$9.00. W. B. Saunders and Company, Philadelphia and London, 1927.

This book represents what we long have advocated as being necessary, namely a book on internal medicine that gives the opinions of a group of men who are especially interested in some particular phase of the subject and therefore best able to discuss it intelligently. Specialism has reached that age where some men in internal medicine, even among our ablest practitioners, devote themselves in a great measure to one disease. In order that physicians and students of medicine might have the benefit of an authoritative and up-to-date treatise on every medical subject it seemed desirable to prepare a textbook of medicine in which each disease or group of diseases would be discussed by a writer particularly interested in that subject. This book represents the effort to carry out such a plan. In all there are 130 contributors, each of whom is a student or investigator of the subject upon which he has written. Most of the contributors are teachers of medicine in university medical colleges and have, therefore, presented their material in a form especially acceptable to medical students. It is a textbook of medicine by American authors. It has been divided into various sections which deal with infectious diseases, diseases of allergy, diseases due to physical agents, diseases due to chemical agents, intoxications, disturbed metabolism, disturbances of the digestive system, the respiratory system, kidneys, blood-forming organs, circulatory system, ductless glands, locomotor system, nervous system and diseases due to deficiencies. It is needless to say that the book is the last word, and probably is the most authoritative treatise on internal medicine published.

**A TEXT-BOOK OF THERAPEUTICS,** Including the Essentials of Pharmacology and Materia Medica. By Arthur A. Stevens, M. D., Professor of Applied Therapeutics in the University of Pennsylvania. Seventh Edition. Entirely reset. Octavo of 758 pages. Philadelphia and London: W. B. Saunders Company, 1927. Cloth, \$6.50 net.

The fact that this work is in its seventh edition is a worthy commentary as to its practical value to students and practitioners. The author has presented in one volume a clear, concise description of the most important pharmacological reactions and their practical use in disease. All the newer remedies of value are included: barium, ephedrine, ethylene, butyn, sulpharsphenamine, tryparsamide, stovarsal, thyroxin, insulin, anydopyrine, parathyroid hormone, bismuth potassium tartrate, mercuric oxycyanide, flumerin, novasural, hexylresorcinol, and the therapeutic dyes; gentian violet, scarlet red, mercurochrome, scarlet fever toxin and antitoxin, erysipelas antitoxin, diathermy, heliotherapy and blood transfusion all given proper space, making this volume an up to date reference work. Under the head of therapeutics, formulæ for the treatment of particular diseases are arranged for ready and easy reference.

**CANCER CONTROL.** Report of an International Symposium Held Under the Auspices of the American So-

ciety for the Control of Cancer, Lake Mohonk, N. Y., September 20-24, 1926. The Surgical Publishing Co. of Chicago, 1927. Cloth, Price \$1.00.

As the above title indicates this book contains the papers, and the discussions thereon, read at an international conference held at Mohonk, New York, under the auspices of the American Society for the Control of Cancer together with the formal resolutions passed at the meeting with the discussions which they provoked plus the report of the Final Dinner and the list of both European (16) and the American (83) guests who attended. The list of guests includes many of the foremost workers of the world on the cancer problem.

No more distinguished group of students of the cancer problem has ever been convened than was this. There were present at this conference representatives from the principal countries of the civilized globe, persons of high standing in the profession of surgery, pathology, bacteriology, physiological chemistry, epidemiology and radiology. There were here physicians who occupy professional chairs in twenty universities, directors of institutes devoted exclusively to cancer research, men and women who do not belong to any profession but whose hearts and minds have been dedicated to the relief of suffering and the prevention of death from this terrible malady. The one element in the cancer problem not represented was the general public—the most important group of all. That this group was not represented was due to unavoidable circumstances.

Notwithstanding the fact that the book is entitled "A Report of an International Conference" it is interesting, important, and heartening to note that the individual responsible for the meeting, Dr. George A. Soper, acting in the capacity of director of the American Society for the Control of Cancer, says in the opening address on the Purpose and Plan of the meeting that the gathering should be looked upon as one "oblivious of all political, racial, and sociological distinction" rather than as one merely international in character.

This book tells all the essential facts known about cancer, including its prevalence, prevention, cure, methods of diagnosis and lastly and of paramount importance the best methods of acquainting the public with the known facts concerning this dread disease which it is necessary for it to know before it will be possible to control the disease to the limit of present-day knowledge on the subject. In illustration of the importance placed upon this phase of the subject by those attending the conference it is only necessary to say that of the twenty-seven papers, presented, fifteen were upon the general topic of organized campaigns against cancer, eight had to do with research and only four with treatment. The importance of this book demands a place for it in all libraries, lay, professional, private and public.

Owing to the fact that the expense of publishing the report (cloth bound and covering over 300 pages) was borne by the Henry M. Lasker Memorial Fund it can be bought for the nominal price of one dollar.

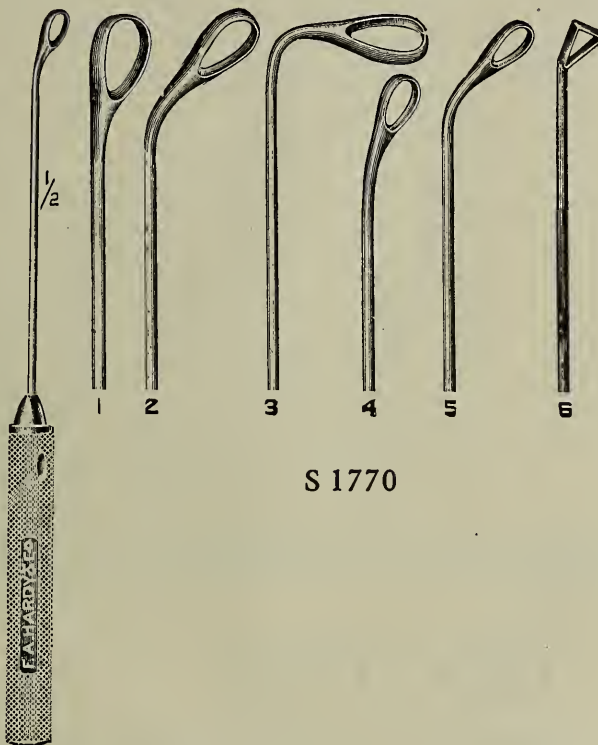
MILES F. PORTER.

**BRONCHOSCOPY AND ESOPHAGOSCOPY.** By Chevalier Jackson, M.D., Professor of Bronchoscopy and Esophagoscopy, Jefferson Medical College; professor of Bronchoscopy and Esophagoscopy, Graduate School of Medicine, University of Pennsylvania. Second edition, reset. Octavo of 457 pages with 179 illustrations and 10 color plates. Cloth. Price, \$8.00. W. B. Saunders and Company, Philadelphia and London. 1927.

Like the first edition this work is an abstract, chapter for chapter, of the author's earlier book, and is essentially a working manual with historical references omitted, and in the words of the author, "should be regarded as an effort to present the fundamentals of the working knowledge of today, rather than the developmental stages by (Continued on adv. p. xx)

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## BOOK REVIEWS

(Continued from page 496)

which those fundamentals were determined." The present edition is more than one hundred pages longer than the first, and a number of new illustrations, photographs and color plates add considerably to the value of the text which is exceedingly well written. To the endoscopist the manual will prove to be a necessity; to the general practitioner a valuable reference work on this important subject.

**EXPERIMENTAL PHARMACOLOGY, AS A BASIS FOR THERAPEUTICS.** A text book for students and physicians by Dr. Hans H. Meyer, Professor of Pharmacology, University of Vienna, and Dr. R. Gottlieb, late Professor of Heidelberg.. Second edition in English, translated by V. E. Henderson, Professor of Pharmacology, University of Toronto, from the 7th German edition. 656 pages, with 87 figures partly in colors and two colored plates. J. B. Lippincott Co., Philadelphia, London and Montreal.

This work deals with the reactions of living organisms to chemical agencies or rather to the behavior of organisms to changes in the chemical environment in which they live. The book is unique in its arrangement and explains logically the actions of remedies in health and disease. Drugs are classified according to their action in the body rather than botanical or chemical classification. It is of particular value to the student for the reason that the subject is approached from the physiology of each organ and its pathological variations and how these may be altered by remedial agents. This work has had seven editions in fifteen years in Germany and its translation into English should be of value to the student and practitioner.

**CLINICAL DIAGNOSIS BY LABORATORY METHODS.** A working manual of clinical pathology. By James

Campbell Todd, Ph.B.M.D., Professor of Clinical Pathology, University of Colorado and Arthur H. Sanford, M. D., professor of Clinical Pathology, University of Minnesota (The Mayo Foundation); Head of Section on Clinical Laboratory, Mayo Clinic. Sixth Edition, Revised and Reset. Octavo of 748 pages with 346 illustrations, 29 in colors. Philadelphia and London: W. B. Saunders Co., 1927, Cloth. \$6.00 net.

To say that this work is popular among laboratory workers is a very modest statement. Its favor among students, teachers and laboratory workers is shown by its being in its sixth edition and having been reprinted six times. Although the fifth edition by Todd contained 762 pages, the shape of the new edition by Todd and Sanford has been altered so that although there are only 748 pages, actually there are about 1500 more lines than in the old edition, equivalent to about 40 more pages. Dr. Todd was indeed fortunate to enlist the collaboration as co-author of so able a man as Dr. A. H. Sanford of the Mayo Clinic. Each chapter has been carefully revised to include the many new advances in clinical pathology, including new methods in blood chemistry, the new liver function tests, namely: Bromsulphalein test, and Van den Berghs and Menlengrachts tests for Bilirubin in the blood. The chapter on animal parasites has been entirely rewritten and new material added to the chapter on bacteriology. On pages 672-3 is to be found the list of the new names for the various pathogenic bacteria as proposed by the American Society of Bacteriologists. This classification divides bacteria into families, tribes, and genera as is done in zoology and botany. Due attention is given Kolmer's quantitative Wassermann technique while the latest modification of Kahn's flocculation test is described. The work is carefully illustrated and in the appendix is a clear key to the laboratory procedures and findings in the important diseases, of especial value to the practitioner. Altogether it is a work that should be in the library of anyone interested in clinical pathology.

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